XR-3690RDS

SERVICE MANUAL

AEP Model
UK Model

Model Name Using Similar Mechanism	XR-3700RDS
Tape Transport Mechanism Type	MG-36SZ6-32

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.13 % (WRMS)
Frequency response	30 – 16,000 Hz
Signal-to- noise ratio	55 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	60 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	
	0.6% (stereo), 0.4% (mono)
Separation	30 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	4 dB

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	20 W × 4 (at 4 ohms)

General

Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 186 × 57 × 170 mm (w/h/d) not incl. projecting parts and controls
Mounting dimension	Approx. 182 × 53 × 154 mm (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.3 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

Reference electronic documents

FM CASSETTE CAR STEREO

SONY®

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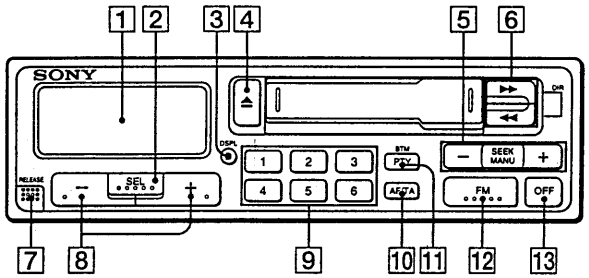
Button Locations



Refer to the pages in ● for details.

1 Display window
2 SEL (control mode select) button ❺⓫
3 DSPL (display mode change/time set) button ❺❽
4 ⏏ (eject) button ❺
5 SEEK/MANU button ❻❼
6 ◀◀/▶▶ (fast winding)/DIR (tape transport direction change) buttons ❺❻
7 RELEASE (front panel release) button ❹⓬
8 [−] [+] (volume/bass/treble/balance/fader control) buttons ❺⓫
9 Preset number buttons ❼
10 AF/TA (alternative frequency/traffic announcement) button ❽❾
11 PTY/BTM (Programme type/Best Tuning Memory Function) button ❼⓾
12 FM (radio on • band select) button ❻❼
13 OFF button ❹

Setting the Clock

The clock has a 24-hour digital indication.

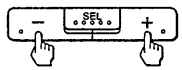
For example, setting it to 10:08

1 Display the time.
(Press the DSPL ⏲ button during unit operation.)

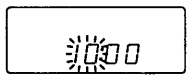
2 Press the DSPL ⏲ button for more than two seconds.

The hour digit(s) blinks.

Set the hour digits.



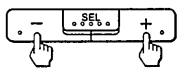
(to go back) (to go forward)



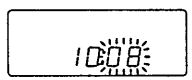
3 Press the SEL button momentarily.

The minute digits blink.

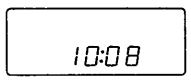
Set the minute digits.



(to go back) (to go forward)



4 Press the DSPL ⏲ button momentarily.



The clock activates.

Note
The clock cannot be set unless the power is turned on. Set the clock after you turn on the radio, or during tape playback.

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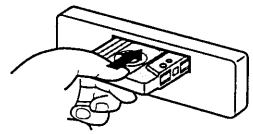
Cassette Player Operation

Listening to Tape Playback

After inserting the cassette, playback will start automatically.



To change the tape direction,
press both the ◀◀ and the ▶▶ buttons at the same time.

Indication of Tape Transport Direction

The side facing up is being played.

The side facing down is being played.

Tape playback automatically changes direction at the end of the tape.

Note
Before turning off the unit, eject the tape to avoid tape damage.

Ejecting the Cassette

Press the ⏏ button to stop playback and eject the cassette.

EN

This section is extracted from instruction manual.

Fast-winding the Tape

Direction indicator*	To advance	To rewind
►		
◄		

To resume playback, press the other fast-winding button partially until the locked button is released.

* *The ◄ or ► indicator will flash while fast-winding the tape.*

EN

Radio Reception

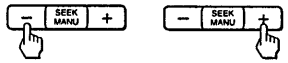
Searching for Stations Automatically

— Automatic Tuning

1 Select the desired band.

FM1 → FM2 → FM3 → FM1

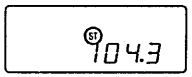
2 Press either side of the SEEK/MANU button momentarily to search for the next station (automatic tuning).



For lower frequencies **For higher frequencies**

The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in,



the "ST" indication will appear.

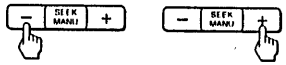
Tuning in by Adjusting the Frequency — Manual Tuning

1 Select the desired band.

FM1 → FM2 → FM3 → FM1

2 Press and hold either side of the SEEK/MANU button.

Release the button when the desired station is received.



For lower frequencies **For higher frequencies**

PREVENT ACCIDENTS!

When tuning in during driving, use the automatic tuning and the memory preset tuning instead of the manual tuning.

Memorizing Stations Automatically

— BTM (Best Tuning Memory) Function

This function selects from the currently received band the stations with the strongest signals and memorizes them in order of their frequency.

1 Select the desired band.

FM1 → FM2 → FM3 → FM1

2 Press the BTM PTY button for more than two seconds.

- When there is no preset number indicated on the display window, stations will be stored on all preset number buttons on the currently selected band.
- When there is a preset number indicated on the display window, the unit will store stations on all preset number buttons from the one currently displayed.

For example, when you select FM2 and preset number 3 is displayed,

the operation will start from preset number 3 on FM2, and will stop at preset number 6 on FM3.

Memorizing Only the Desired Stations

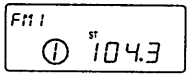
1 Select the desired band.

FM1 → FM2 → FM3 → FM1

2 Tune in the station which you wish to store on the preset number button.

3 Press and hold the desired preset number button (1 to 6) for about two seconds until you hear a beep tone.

The number of the pressed preset number button appears in the display window.



Up to 6 stations on each band (FM1, FM2 and FM3) can be stored on the preset number buttons in the order of your choice. Therefore, 18 stations can be memorized on FM. If you try to store another station on the same preset number button, the previously stored station will be erased.

Receiving the Memorized Stations

1 Select the desired band.

FM1 → FM2 → FM3 → FM1

2 Press momentarily the preset number button (1 to 6) on which the desired station is stored.

Note

If you press the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, make sure that the preset number button is pressed only momentarily.

EN

RDS Functions

Overview of the RDS Function

Radio Data System (RDS) is a broadcasting service that allows FM stations to send additional digital information along with the regular radio programme signal. Your car stereo offers you a variety of services. Here are just a few: Re-tuning the same programme automatically, Listening to traffic announcements and Locating a station by programme type.

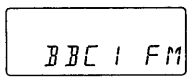
Notes

- *Depending on the country or region, not all of the RDS functions are available.*
- *RDS may not work properly if the signal strength is weak or if the station you are tuned in is not transmitting RDS data.*

Displaying the Station Name

The name of the station currently received lights up in the display.

Select an FM station.
When you tune in an FM station that transmits RDS data, the station name lights up in the display.



Note
The "" indication means that an RDS station is being received.*

Changing the displayed items

Each time you press the DISPLAY button, the displayed items change as follows:

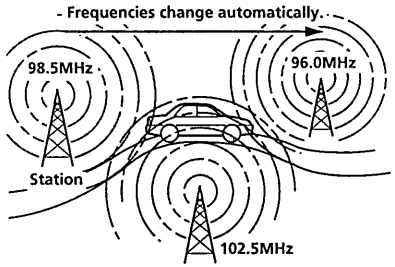
Frequency → Time → StationName

Note
"NO Name" lights up if the station received does not transmit RDS data.

Re-tuning the Same Programme Automatically

— Alternative Frequencies (AF)

The Alternative Frequencies (AF) function automatically selects and re-tunes the station with the strongest signal in a network. By using this function, you can continuously listen to the same programme during a long-distance drive without having to re-tune the station manually.



1 Select an FM station.

2 Press the AF/TA button until "AF ON" lights up in the display.
The unit starts searching for an alternative station with a stronger signal in the same network.

Note
When there is no alternative station in the area and you don't need to search for an alternative station, turn the AF function off by pressing the AF/TA button until "AF/TA OFF" lights up.

Changing the displayed items

Each time you press the AF/TA button, the displayed items change as follows:

AF ON → TA ON → AF/TA ON* → AF/TA OFF

** Select this to turn on both AF and TA functions.*

Notes

- *"NO AF" and the station name flashes alternately, if the unit cannot find an alternative station in the network.*
- *If the station service name starts flashing after you've made the preset selection, it means that no alternative frequency is available and the unit cannot receive the PI (Programme Identification) data of the memorized station. Press the SEEK/MANU button while the station service name is flashing (for about eight seconds) so the unit starts searching for a station with the same PI data, but with another frequency ("PI seek" lights up and no sound is heard). If the unit still cannot find an alternative station, "NO PI" lights up and the unit goes back to the original preset station.*

Listening to a regional programme

The "REG ON" (regional on) function of this unit lets you stay tuned to a regional programme without being switched to another regional station. (Note that you must turn the AF function on.) The unit is factory preset to "REG ON," but if you want to turn off the function, do the following.

Press the AF/TA button for more than two seconds until "REG OFF" lights up in the display.
Note that selecting "REG OFF" might cause the unit to switch to another regional station within the same network.

Note
This function does not work in the United Kingdom and in some other areas.

Local Link function (United Kingdom only)

The Local Link function lets you select other local stations in the area, even though they are not stored in your presets.

1 Press a preset number button that has stored a local station.

2 Within five seconds, press again the preset number button of the local station.

3 Repeat this procedure until the desired local station is received.

Listening to Traffic Announcements

The Traffic Announcement (TA) and Traffic Programme (TP) data let you automatically tune in an FM station that is broadcasting traffic announcements even though you are listening to other sources.

Press the AF/TA button until "TA ON" or "AF/TA ON" lights up in the display.
The unit starts searching for traffic information stations. "TP" lights up in the display when the unit finds a station broadcasting traffic announcements.
When the traffic announcement starts, "TA" flashes, then flashing stops when the traffic announcement is over.

Tip
When the traffic announcement starts while you are listening to another programme source, the unit automatically switches to the announcement and goes back to the original source when the announcement is over.

Notes

- *"NO TP" flashes for five seconds if the received station doesn't broadcast traffic announcements. Then, the unit starts searching for a station that does broadcast traffic announcements.*
- *When the "EON" indication appears with "TP" in the display window, the current station makes use of broadcast traffic announcements of other stations in the same network.*

To cancel the current traffic announcement

Press the AF/TA button momentarily.
To cancel all traffic announcements, turn off the function by pressing the AF/TA button until "AF/TA OFF" lights up.

Presetting the volume of traffic announcements

You can preset the volume level of the traffic announcements beforehand so you wouldn't miss the announcement. When a traffic announcement starts, the volume will be automatically adjusted to the preset level.

1 Select the desired volume level.

2 Press the 3 button while pressing the SEL button.
A beep sounds and the setting is stored.

Receiving emergency announcements

If an emergency announcement comes in while you are listening to the radio, the programme will be automatically switched to the announcement. If you are listening to a source other than the radio, the emergency announcements will be heard if you set AF or TA to on. The unit will then automatically switch to these announcements no matter what you are listening to at the time.

Presetting the RDS Stations with the AF and TA Data

When you preset the RDS stations, the unit stores each station's data as well as its frequency, so you don't have to turn on the AF or TA function every time you tune in the preset station. You can select different setting (AF, TA, or both) for individual preset station or the same setting for all preset stations.

Presetting the same setting for all preset stations

1 Select an FM band.

2 Press the [AF/TA] button repeatedly and select either "AF ON, " "TA ON," or "AF/TA ON"(for both AF and TA functions).
Note that selecting "AF/TA OFF" stores not only RDS stations, but also non-RDS FM stations.

3 Press the [BTM PTY] button for two seconds.

Presetting different settings for each preset station

1 Select an FM band and tune in the desired station.

2 Press the [AF/TA] button repeatedly and select either "AF ON, " "TA ON," or "AF/TA ON"(for both AF and TA functions).

3 Press the desired preset number button for two seconds until a beep sounds. Repeat from step 1 for presetting other stations.

Tip
If you want to change the preset AF and/or TA setting after you tuned in the preset station, you can do so by turning on/off the AF or TA function.

Locating a Station by Programme Type

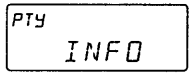
You can locate the station you want by selecting one of the programme types shown below.

Note
In the countries or regions where EON data is not transmitted, you can use this function only for the stations you have tuned in once.

Programme types	Display
News	NEWS
Current Affairs	AFFAIRS
Information	INFO
Sports	SPORT
Education	EDUCATE
Drama	DRAMA
Culture	CULTURE
Science	SCIENCE
Varied	VARIED
Popular Music	POP M
Rock Music	ROCK M
Middle of the Road Music	M.O.R. M
Light Classical	LIGHT M
Classical	CLASSICS
Other Music Type	OTHER M
Not specified	NONE

Note
You cannot use this function in some countries where no PTY (Programme Type selection) data is available.

1 Press the [BTM PTY] button during FM reception until "PTY" lights up in the display.



The current programme type name appears if the station is transmitting the PTY data. "- - - - -" appears if the received station is not an RDS station or if the RDS data has not been received.

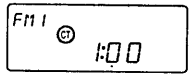
2 Press the [BTM PTY] button repeatedly until the desired programme type appears.
The programme types appear in the order as shown in the above table. Note that you cannot select "NONE" (Not specified) for searching.

3 Press either side of the SEEK/MANU button.
The unit starts searching for a station broadcasting the selected programme type. When the unit finds the programme, the programme type appears again for five seconds.
"NO" and the programme type appear alternately for five seconds if the unit cannot find the programme type and it returns to the previous station.

Using RDS Data for Setting the Clock Automatically

By receiving CT (Clock Time) data, the clock of this unit can be set automatically.

During FM reception, press the [2] button while pressing the [SEL] button. → "CT" will be displayed, and the clock will be set.



To cancel the CT function, press these buttons again.

Notes
- *The CT function may not work even though an RDS station is being received.*
- *The time set by the CT function may not be exact.*

Other Functions

Adjusting the Sound Characteristics

1 Select the item you want to adjust by pressing the [SEL] button repeatedly.

VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) →VOL (volume)

2 Adjust the selected item by pressing either the [−] or [+] button.

Adjust within three seconds after selecting. (After three seconds the button will again serve as volume control button.)

Enjoying Bass and Treble at Low Volume

— Loudness Function

Press the [4] button while pressing the [SEL] button. → "LOUD" will appear on the display.
Bass and treble will be boosted. To cancel, press again.

Muting the Beep Tone

Press the [6] button while pressing the [SEL] button.
To reactivate the beep tone, press these buttons once more.

Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the power connecting cord ⑤ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all ground wires to a common ground point.**

Connexions

Précautions

- Cet appareil est conçu pour fonctionner sur un courant continu de 12 V avec masse négative.
- Branchez le cordon d'alimentation ⑤ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassemblez tous les fils de terre en un point de masse commun.**

Anschluß

Vorsicht

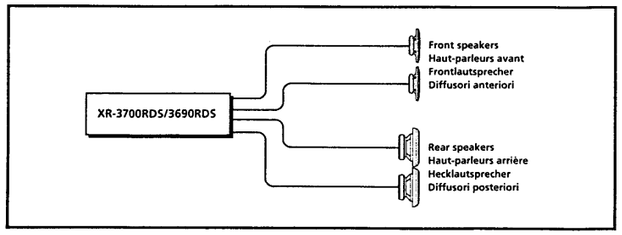
- Dieses Gerät ist ausschließlich für eine negativ geerdete 12-V-Autobatterie bestimmt.
- Verbinden Sie das Netzverbindungskabel ⑤ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluß verbinden.
- **Leiten Sie alle Erdungskabel an einen gemeinsamen Massepunkt ab.**

Collegamenti

Attenzione

- Questo apparecchio è stato progettato per l'uso solo in funzionamento a 12 V CC con massa negativa.
- Collegare il cavo di collegamento dell'alimentazione ⑤ all'apparecchio e agli altoparlanti prima di collegarlo al connettore di alimentazione ausiliare.
- **Portare tutti i cavi di massa a un punto di massa comune.**

Connection Diagram/Schéma de connexions/ Anschlußdiagramm/Schema di collegamento



Note on the control leads

The power antenna control lead (blue) supplies 12V DC power when you turn on the tuner or listen to tape playback.

Notes on speaker connections

- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Warning

If you have a power antenna without a relay box, connecting this unit with the supplied power connecting cord ⑤ may damage the antenna.

Remarque sur les fils de contrôle

Le fil de commande (bleu) de l'antenne électrique fournit une tension de 12 V CC lorsque vous mettez le syntoniseur sous tension ou que vous écoutez une cassette.

Remarques sur la connexion des haut-parleurs

- *Utiliser des haut-parleurs avec une impédance de 4 à 8 ohms et qui peuvent supporter l'alimentation fournie sinon ils risqueraient d'être endommagés.*
- *Ne pas connecter les bornes du système de haut-parleur au châssis de la voiture et ne pas raccorder les bornes du haut-parleur droit aux bornes du haut-parleur gauche.*
- *Ne pas essayer de connecter les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceintes de cet appareil pour éviter de les endommager. Veiller à raccorder des enceintes passives.*

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ⑤ risque d'endommager l'antenne.

Hinweise zu den Steuerleitungen

Die Steuerleitung (blau) der Motorantenne liefert eine Gleichspannung von 12 Volt, wenn Sie den Tuner einschalten oder eine Kassette wiedergeben lassen.

Hinweise zum Lautsprecheranschluß

- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Schließen Sie niemals Lautsprecher parallel an.*
- *An die Lautsprecheranschlüsse dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie auf keinen Fall Aktivlautsprecher (mit eingebautem Verstärker) an, da diese beschädigt werden könnten..*

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit Hilfe des mitgelieferten Netzverbindungskabels ⑤ die Antenne beschädigt werden.

Note sul cavi di collegamento

Il cavo (blue) di controllo dell'antenna fornisce alimentazione CD 12 quando si attiva il sintonizzatore o si ascolta la riproduzione del nastro.

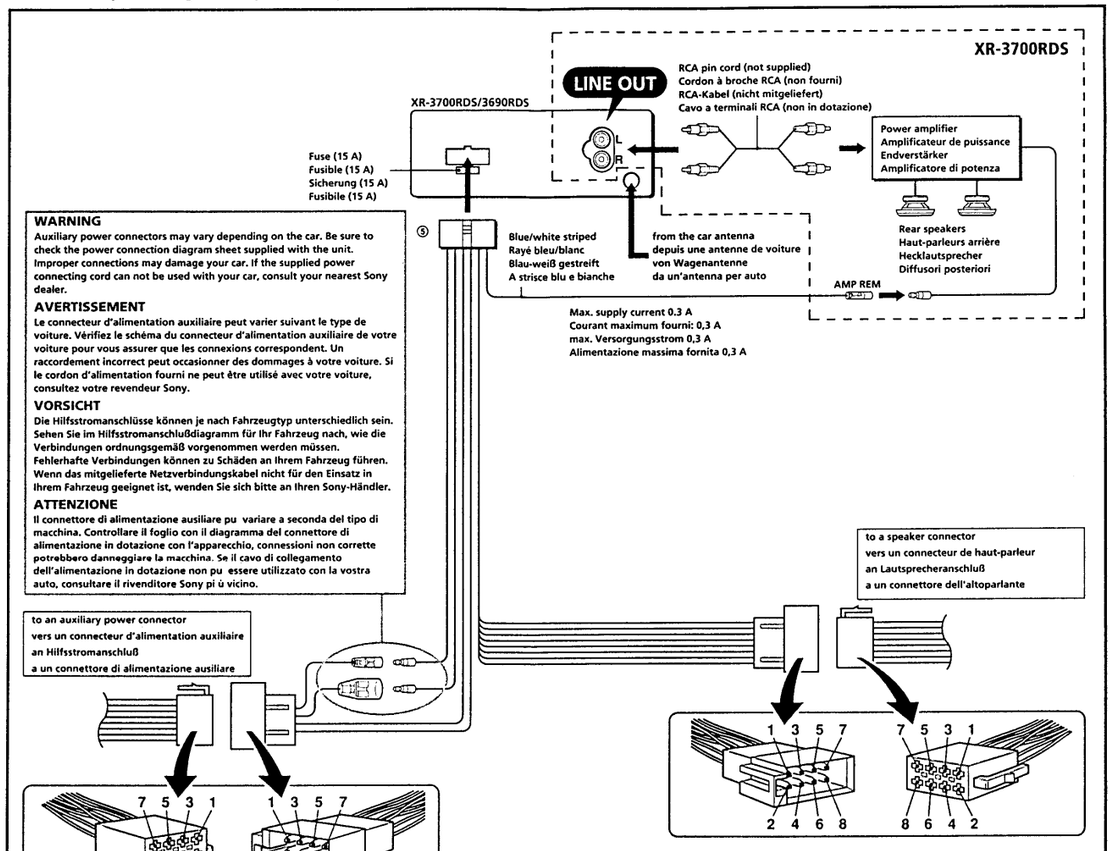
Note sul collegamento dei diffusori

- *Usare diffusori di impedenza compresa tra i 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori possono essere danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell' auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare i diffusori in parallelo.*
- *Non collegare diffusori attivi (con amplificatori incorporati) ai terminali diffusori dell'apparecchio, perché i diffusori attivi potrebbero essere danneggiati. Collegare solo diffusori passivi a questi terminali.*

Avvertenza

Se l'antenna che collega l'apparecchio al cavo di alimentazione in dotazione ⑤ non ha la scatola di relè, l'antenna. si può danneggiare

Connections of Example/Connexions de l'exemple/ Anschlußbeispiel/Collegamenti per l'esempio


XR-3700RDS
LINE OUT
XR-3700RDS/3690RDS
RCA pin cord (not supplied)
Cordon à broche RCA (non fourni)
RCA-Kabel (nicht mitgeliefert)
Cavo a terminali RCA (non in dotazione)
Power amplifier
Amplificateur de puissance
Endverstärker
Amplificatore di potenza
Fuse (15 A)
Fusible (15 A)
Sicherung (15 A)
Fusibile (15 A)
Blue/white striped
Rayé bleu/blanc
Blau-weiß gestreift
A strisce blu e bianche
from the car antenna
depuis une antenne de voiture
von Wagenantenne
da un'antenna per auto
Rear speakers
Haut-parleurs arrière
Hecklautsprecher
Diffusori posteriori
AMP REM
Max. supply current 0.3 A
Courant maximum fourni: 0,3 A
max. Versorgungsstrom 0,3 A
Alimentazione massima fornita 0,3 A
WARNING
Auxiliary power connectors may vary depending on the car. Be sure to check the power connection diagram sheet supplied with the unit. Improper connections may damage your car. If the supplied power connecting cord can not be used with your car, consult your nearest Sony dealer.
AVERTISSEMENT
Le connecteur d'alimentation auxiliaire peut varier suivant le type de voiture. Vérifiez le schéma du connecteur d'alimentation auxiliaire de votre voiture pour vous assurer que les connexions correspondent. Un raccordement incorrect peut occasionner des dommages à votre voiture. Si le cordon d'alimentation fourni ne peut être utilisé avec votre voiture, consultez votre revendeur Sony.
VORSICHT
Die Hilfsstromanschlüsse können je nach Fahrzeugtyp unterschiedlich sein. Sehen Sie im Hilfsstromanschlußdiagramm für Ihr Fahrzeug nach, wie die Verbindungen ordnungsgemäß vorgenommen werden müssen. Fehlerhafte Verbindungen können zu Schäden an Ihrem Fahrzeug führen. Wenn das mitgelieferte Netzverbindungskabel nicht für den Einsatz in Ihrem Fahrzeug geeignet ist, wenden Sie sich bitte an Ihren Sony-Händler.
ATTENZIONE
Il connettore di alimentazione ausiliare pu variare a seconda del tipo di macchina. Controllare il foglio con il diagramma del connettore di alimentazione in dotazione con l'apparecchio, connessioni non corrette potrebbero danneggiare la macchina. Se il cavo di collegamento dell'alimentazione in dotazione non pu essere utilizzato con la vostra auto, consultare il rivenditore Sony pi ù vicino.
to a speaker connector
vers un connecteur de haut-parleur
an Lautsprecheranschluß
a un connettore dell'altoparlante
to an auxiliary power connector
vers un connecteur d'alimentation auxiliaire
an Hilfsstromanschluß
a un connettore di alimentazione ausiliare
1 3 5 7
2 4 6 8
7 5 3 1
8 6 4 2

Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione	Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione
4	Yellow Jaune Gelb Giallo	continuous power supply alimentation continue permanente Stromversorgung alimentazione continua	7	Red Rouge Rot Rosso	switched power supply alimentation commutée geschaltete Stromversorgung alimentazione a scatto
5	Blue Bleu Blau Blu	power antenna control antenne électrique elektronische Antenne antenna elettrica	8	Black Noir Schwarz Nero	ground masse Masse terra

Positions 1, 2, 3 and 6 do not have pins.
Les positions 1, 2, 3 et 6 ne comportent pas de broche.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Le posizioni 1, 2, 3 e 6 non hanno pin.

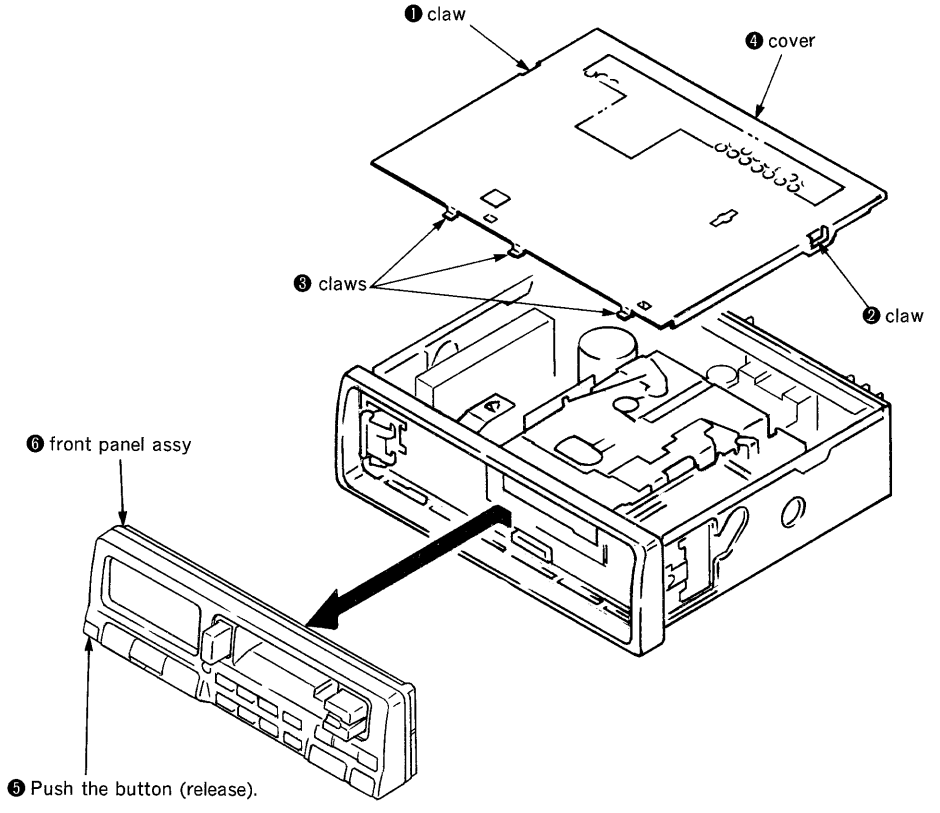
Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione	Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione
1	Purple Mauve	+; Speaker, Rear, Right +; haut-parleur, arrière, droit +: Lautsprecher hinten rechts Altoparlante, posteriore, destro	5	White Blanc Weiß Blanco	+; Speaker, Front, Left +; haut-parleur, avant, gauche +: Lautsprecher vorne links Altoparlante, anteriore, sinistro
2	Violett Viola	–; Speaker, Rear, Right –; haut-parleur, arrière, droit –: Lautsprecher hinten rechts Altoparlante, posteriore, destro	6		–; Speaker, Front, Left –; haut-parleur, avant, gauche –: Lautsprecher vorne links Altoparlante, anteriore, sinistro
3	Gray Gris Grau Grigio	+; Speaker, Front, Right +; haut-parleur, avant, droit +: Lautsprecher vorne rechts Altoparlante, anteriore, destro	7	Green Vert Grün Verde	+; Speaker, Rear, Left +; haut-parleur, arrière, gauche +: Lautsprecher hinten links Altoparlante, posteriore, sinistro
4		–; Speaker, Front, Right –; haut-parleur, avant, droit –: Lautsprecher vorne rechts Altoparlante, anteriore, destro	8		–; Speaker, Rear, Left –; haut-parleur, arrière, gauche –: Lautsprecher hinten links Altoparlante, posteriore, sinistro

Negative polarity positions 2, 4, 6 and 8 have striped cords.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich farbige Adern.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi spelati.

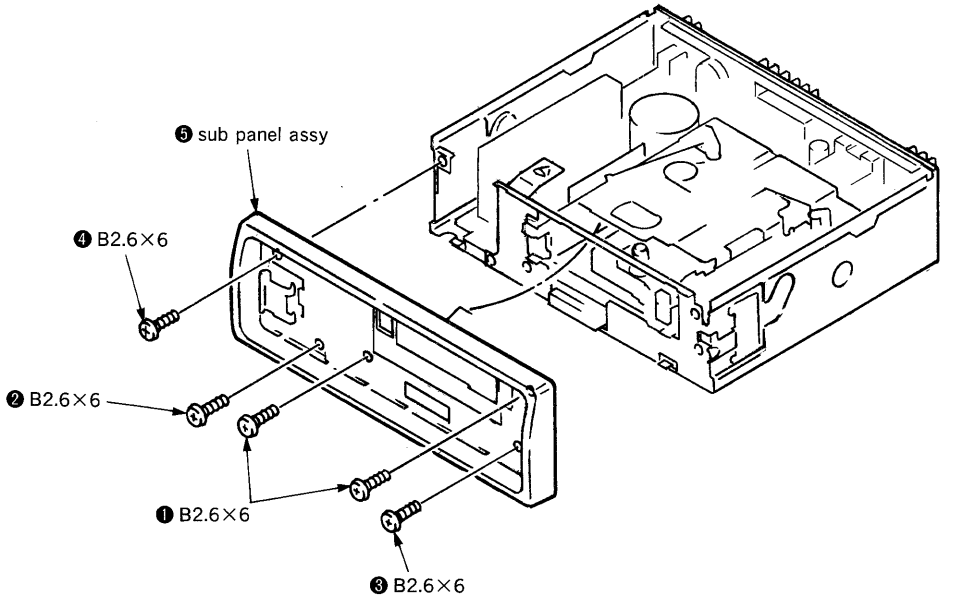
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

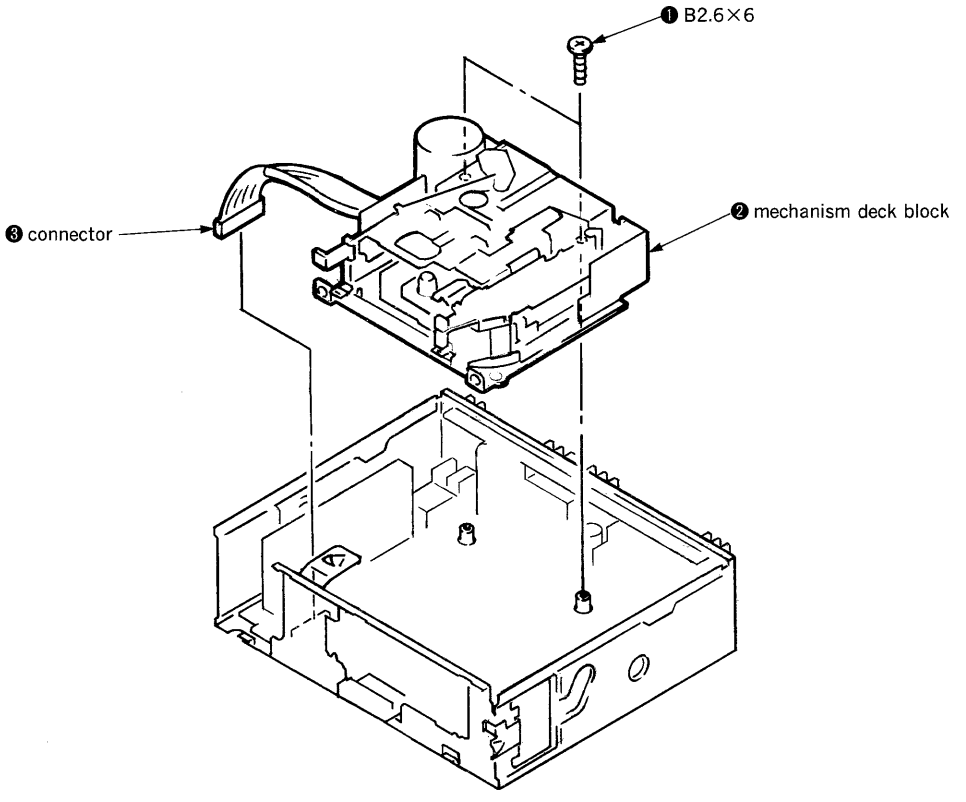
2-1. COVER



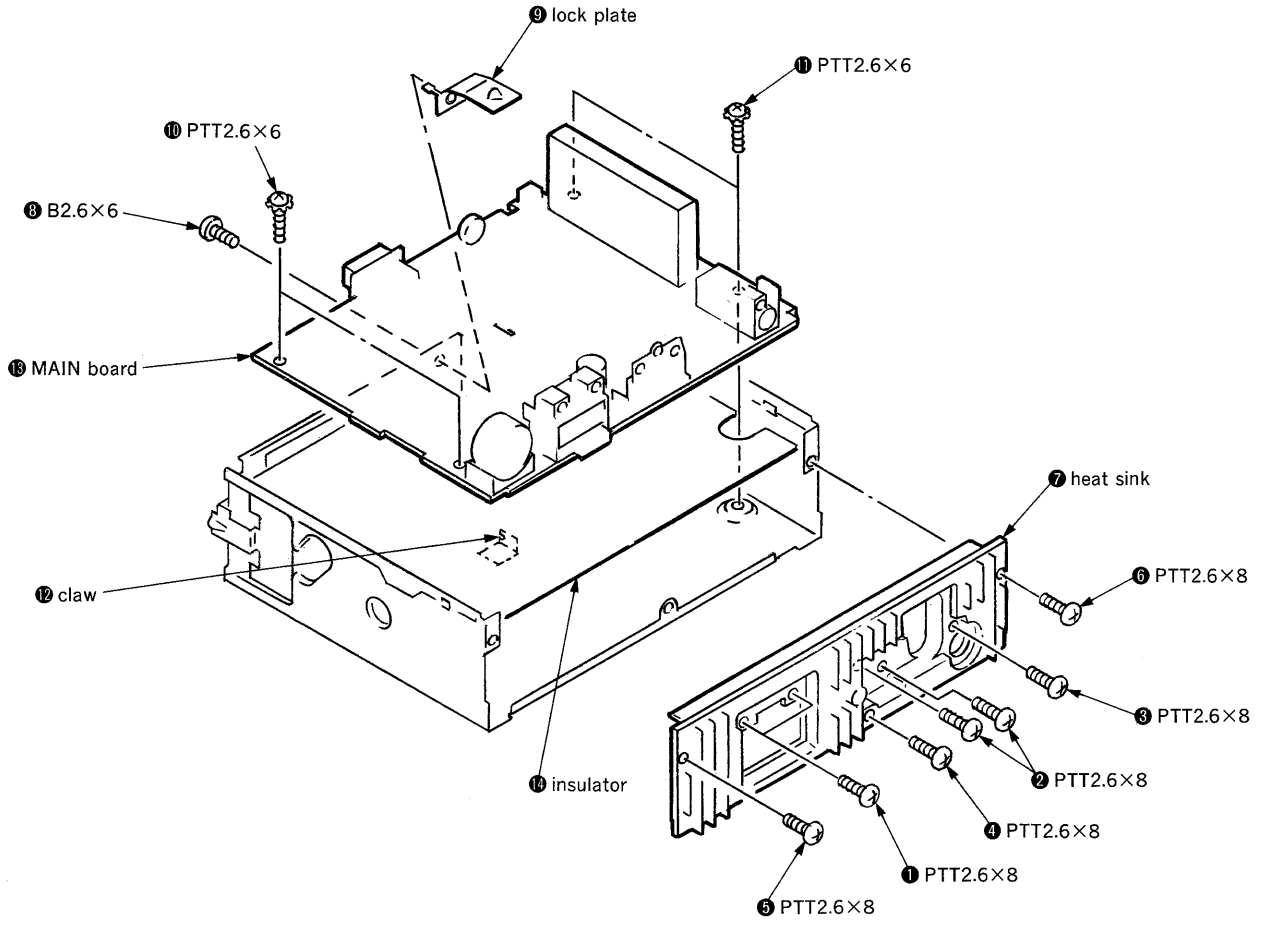
2-2. SUB PANEL ASSY



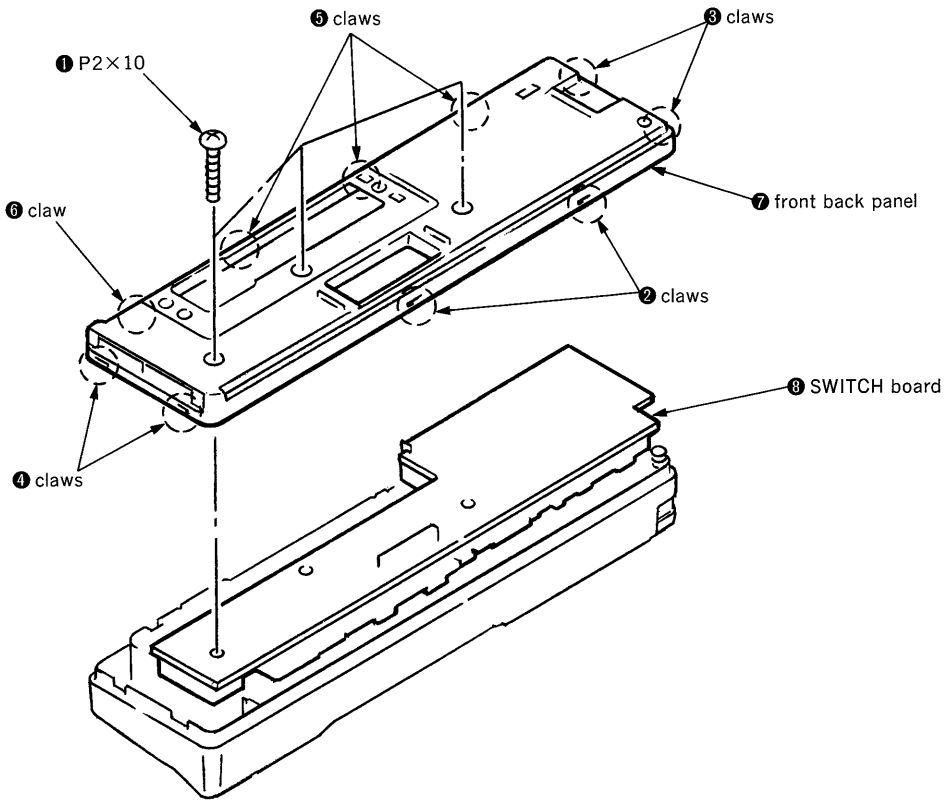
2-3. MECHANISM DECK BLOCK



2-4. MAIN BOARD



2-5. SWITCH BOARD



SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment:
   PB head　　Pinch roller
   Idler　　Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (13.2V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	25−55g•cm (0.35−0.76 oz•inch)
FWD Back Tension		1.5−4.0g•cm (0.02−0.05 oz•inch)
REV	CQ-102RC	25−55g•cm (0.35−0.76 oz•inch)
REV Back Tension		1.5−4.0g•cm (0.02−0.05 oz•inch)
FF, REW	CQ-201B	more than 50g•cm (more than 0.70oz•inch)

SECTION 4
ELECTRICAL ADJUSTMENTS

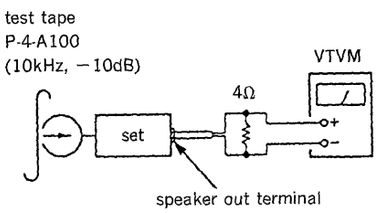
See the adjustment location from on page 15 for the adjustment.

DECK SECTION　**0dB=0.775V**

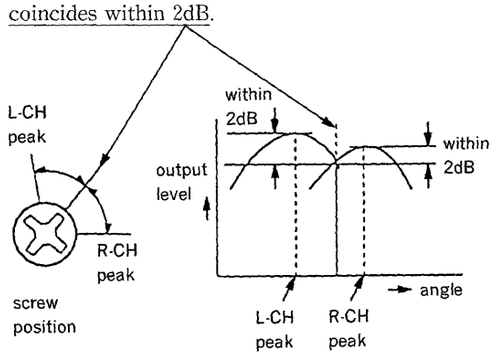
PB Head Azimuth Adjustment

Procedure:

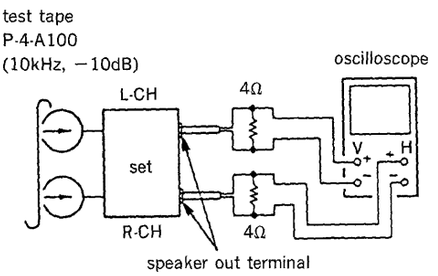
1. Put the set into the FWD PB mode.

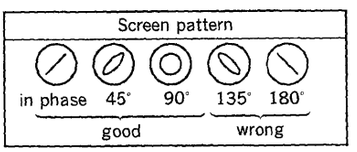


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2dB.



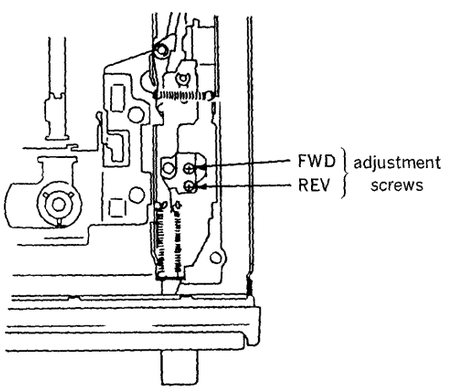
3. Check the phase in the PB mode.





4. Repeat the above adjustment for the REV PB mode.

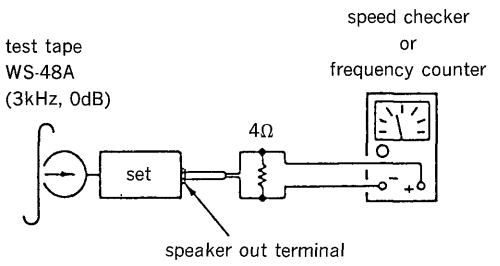
Adjustment Location: PB head



Capstan Motor Tape Speed Adjustment

Procedure :

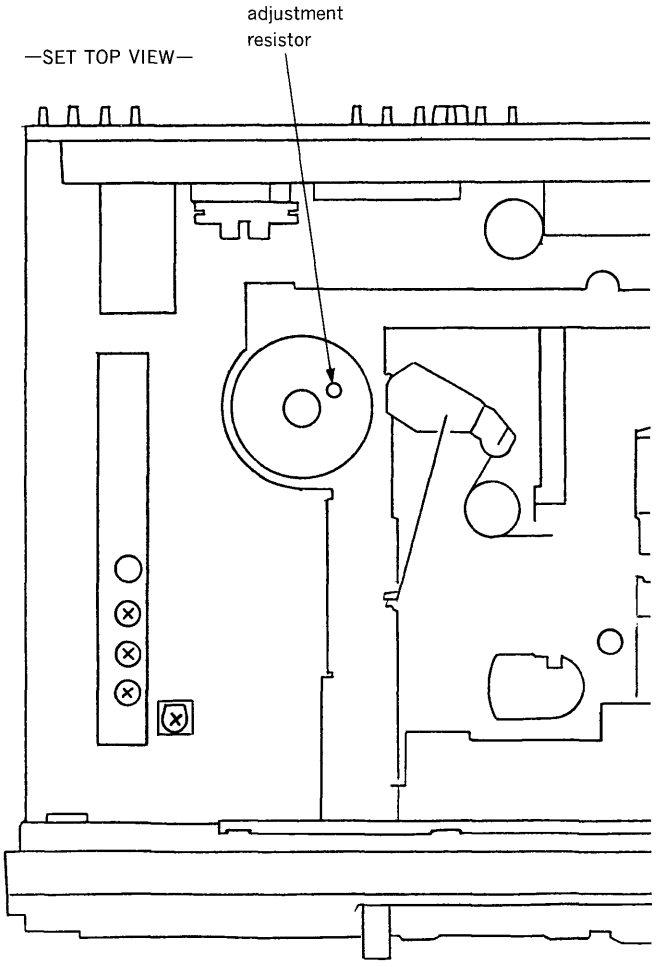
1. Put the set into the FWD PB mode.



Specification : Constant speed

Speed checker	Frequency counter
−2.0 to +3.0%	2,940 to 3,090Hz

Adjustment Location :



TUNER SECTION | 0dB=1μV

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level adjustment can be performed easier than it in ordinaly procedure.

〈Set the Test Mode〉

1. Set the "OFF" mode. (Push the [OFF] button.)
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for two seconds.
5. Then the display indicates and LEDs are all lighting, the test mode is set.

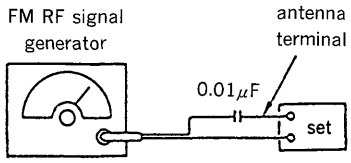
〈Release the Test mode〉

1. Push the [OFF] button.

FM Auto Scan/Stop Level Adjustment

Setting :

FM button : FM

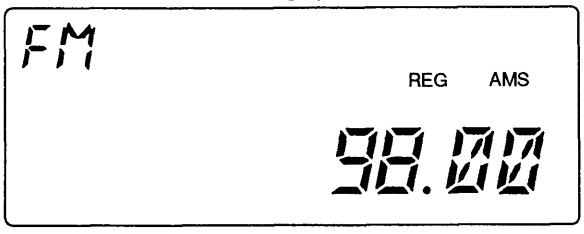


Carrier frequency : 98.00MHz
Output level : 22dB (12.6μV)
Mode : mono
Modulation : 1kHz, 30% deviation

Procedure :

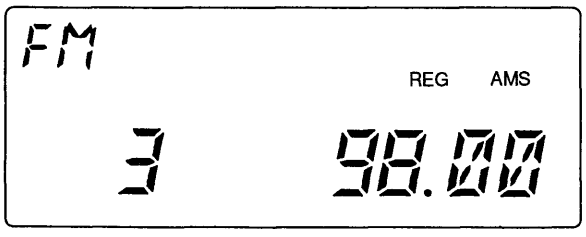
1. Set to the test mode. (See page 13.)
2. Push the [FM] button and set to FM.

Display



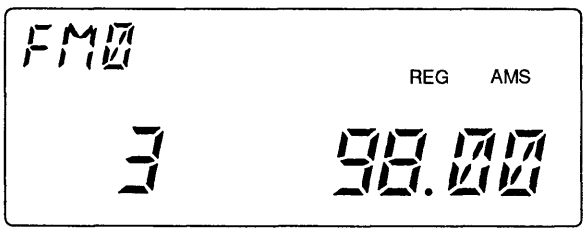
3. Push the preset [3] button.

Display



4. Adjust with the volume RV1 on TU1 so that the "FM" indication turns to "FM0" indication on the display window.
   But, in case of already indicated "FM0", turn the RV3 so that put out light "0" indication and adjustment.

Display

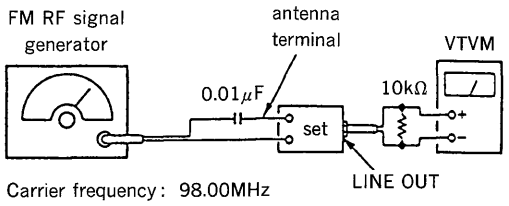


Adjustment Location : See page 15.

FM Noise Focus Adjustment

Setting :

FM button : FM



Carrier frequency : 98.00MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 1kHz, 75kHz deviation

Procedure :

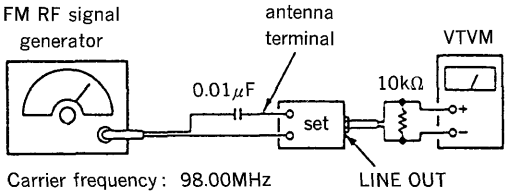
1. Tune the 98.00MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV2 on TU1 so that the output level is (A)−31dB then signal generator input set to −20dB.

Adjustment Location : See page 15.

FM Stereo Separation Adjustment

Setting :

FM button : FM



Carrier frequency : 98.00MHz
Output level : 70dB (3.2mV)
Mode : stereo
Modulation : main : 1kHz, 33.5kHz deviation (45%)
sub : 1kHz, 33.5kHz deviation (45%)
pilot : 1kHz, 7.5kHz deviation (10%)

Procedure :

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV3 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV3 on TU1 for minimum reading.

L-CH Stereo separation : Ⓐ−Ⓑ
R-CH Stereo separation : Ⓒ−Ⓓ
The separations of both channels should be equal.

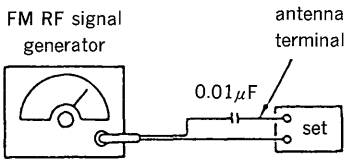
Specification : Separation more than 27dB

Adjustment Location : See page 15.

FM Signal Meter Adjustment

Setting :

FM button : FM

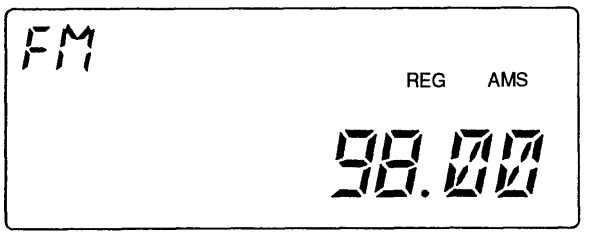


Carrier frequency : 98.00MHz
Output level : 35dB (56.2μV)
Mode : mono
Modulation : no modulation

Procedure :

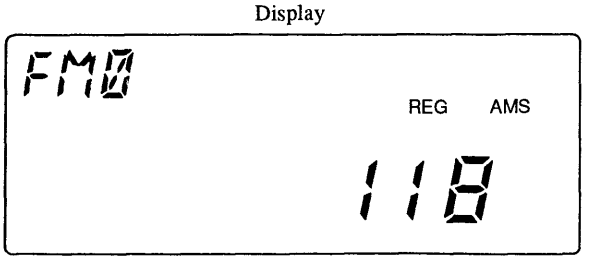
1. Set to the test mode. (See page 13.)
2. Push the [FM] button and set to FM.

Display



3. Push the preset [6] button.
4. Adjust RV1 so that the display indication is "118".

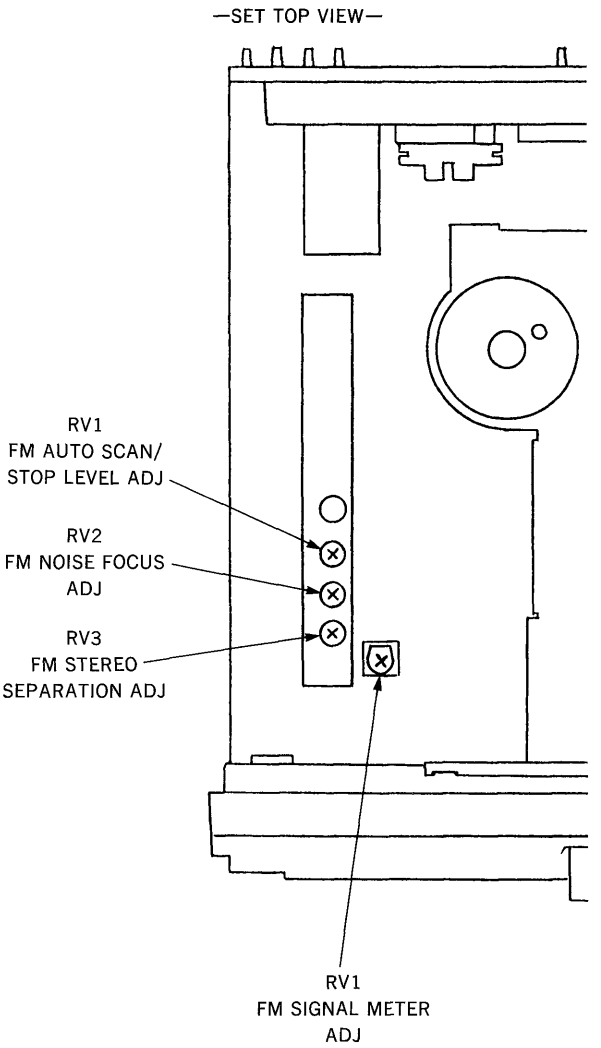
Display



Specification : Display indication : 116 to 120

Adjustment Location : See page 15.

Adjustment Location :



SECTION 5
DIAGRAMS

5-1. IC PIN DESCRIPTIONS

• IC501 MN1884820S3W (System Control)

Pin No.	Pin Name	I/O	Pin Description
1	TUN MUTE	O	TUNER MUTE output terminal
2	AMPON	O	Power amplifier power control output terminal
3	ILLON	O	Illumination power control output terminal
4	PW ON	O	System power control output terminal
5	$\overline{\text{AMPMUT}}$	O	Power amplifier mute control output terminal
6	—	—	Not used.
7	VDD1	—	Power terminal
8	OSC. IN	I	Connection oscillator 8MHz cera-lock
9	OSC. OUT	O	Connection oscillator 8MHz cera-lock
10	GND	—	GND
11	XT IN	I	32kHz crystal connection
12	XT OUT	O	32kHz crystal connection
13	EX2	I	Connect to GND.
14	$\overline{\text{RESET}}$	I	Reset input terminal. "L" for Reset.
15	RDSCLK	I	RDS-CLK input terminal
16	BU IN	I	BACK-UP detection input terminal
17	KEYACK	I	Key input acknowledge terminal
18	VOLSO	O	Electric volume serial data output terminal
19	VOLCKO	O	Electric volume serial clock output terminal
20	VOLCE	O	Electric volume serial chip enable output terminal
21	TAPE MUTE	—	Not used.
22—24	—	—	Not used.
25	$\overline{\text{AMSON}}$	I/O	AMS control input/output terminal
26	ATAON	I/O	ATA control input/output terminal
27	$\overline{\text{TAPE. IN}}$	I	TAPE pack-in detection input terminal
28	$\overline{\text{FF-REW. IN}}$	I	FF/REW detection input terminal
29	N/$\overline{\text{R}}$	I	FWD/REV detection input terminal
30	RDSSI	I	RDS-DATA input terminal
31	$\overline{\text{AD ON}}$	O	AD port power control output terminal
32	DOLON	I/O	DOLBY control input/output terminal
33	MTLON	I/O	METAL control input/output terminal
34	CM. ON	O	TAPE capstan motor control signal output terminal
35	TAPE. ON	—	Not used.
36	$\overline{\text{ACCIN}}$	I	ACC power detection input terminal
37	PLLSI	I	PLL DATA input terminal
38	BEEP	O	BEEP sound control output terminal
39	PLLSO	O	PLL DATA output terminal
40	PLLCLK	O	PLL CLK output terminal
41	PLLCE	O	PLL CE output terminal
42	$\overline{\text{LCD INH}}$	O	LCD blank display control output terminal
43	LCD CE	O	LCD chip enable output terminal
44	LCD CLK	O	LCD serial clock output terminal
45	—	—	Not used.
46	LCD SO	O	LCD serial data output terminal

Pin No.	Pin Name	I/O	Pin Description
47	VDD2	—	Power terminal
48	AVDD	—	Power terminal of AD input port. Connect to pin ㊼.
49	AVREF+	—	Reference voltage input of AD input port. (+ side)
50, 51	KEYIN1, KEYIN0	I	KEY input terminal
52, 53	KEYSEL1, KEYSEL0	—	Connect to GND.
54, 55	DSTSEL1, DSTSEL0	—	Connect to GND.
56	(AM VSM)	—	Connect to GND.
57	FM VSM	I	Signal meter AD input port terminal of FM.
58	AVREF−	—	Reference voltage input of AD input port. (− side)
59	AVSS	—	GND. Connect to pin ㊽.
60	GND	—	GND
61, 62	—	—	Not used.
63	$\overline{\text{SEEK OUT}}$	O	SEEK OUT output terminal
64	$\overline{\text{TUN ON}}$	O	TUNER power control output terminal
65	FM ON	—	Not used.
66	MUTE	O	System MUTE output terminal
67	AF SEEK	O	Output terminal for AF-SEEK.
68	—	—	Not used.
69	$\overline{\text{NOSESW}}$	I	Input pin for detecting mounting of front panel.
70	ST	I	ST indicate to turn ON for "L".
		O	At forced monaural, output for "L".
71	SDIN	I	STOP decide on SEEK, AUTO-MEMORY and SCAN.
72	—	—	Not used.
73	PW. SEL	I	Power select switching input terminal
74—78	—	—	GND
79	TEST	I	Test mode input terminal
80	—	—	Not used.

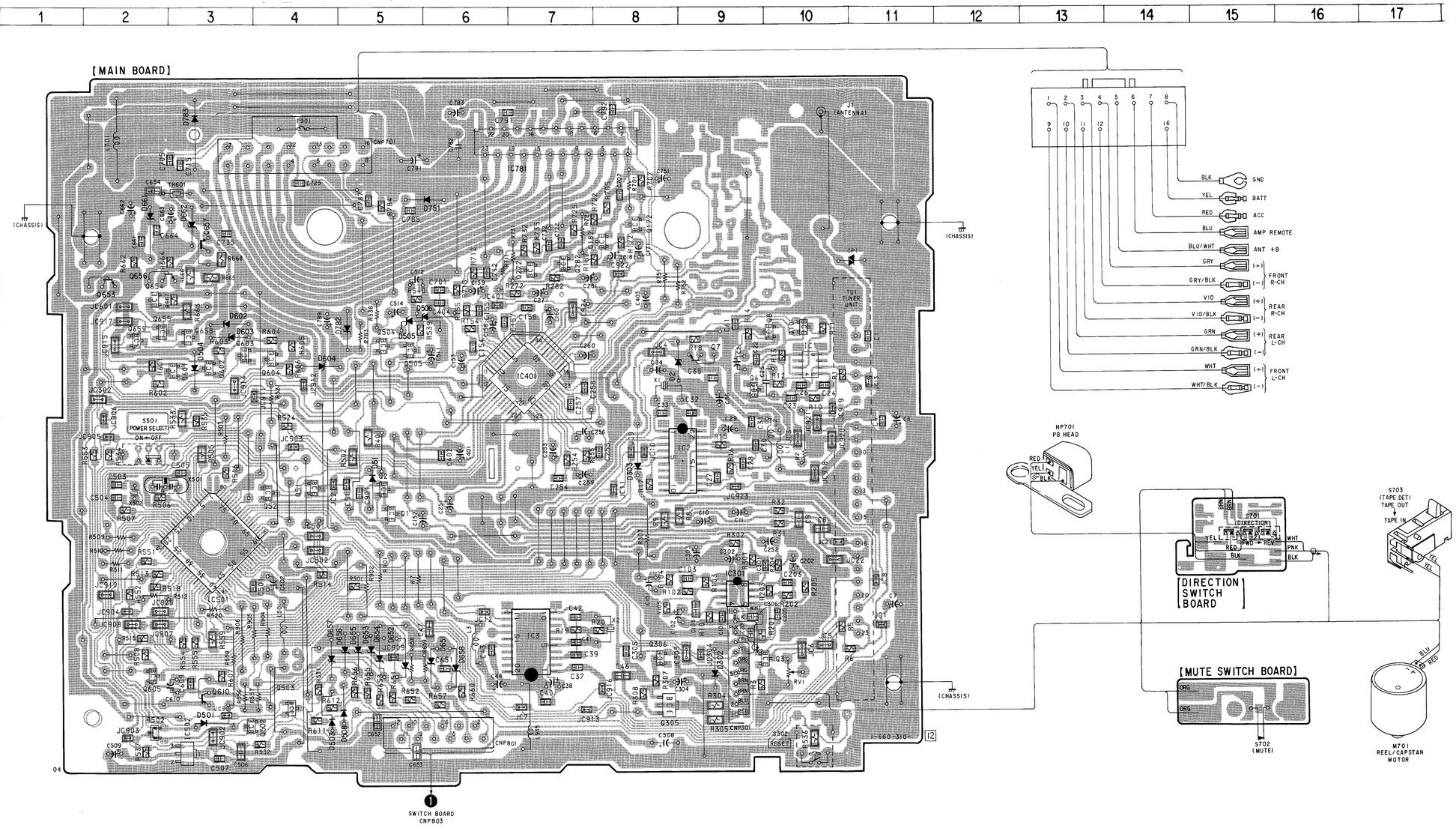
5-2. PRINTED WIRING BOARDS—MAIN SECTION—

SEE ADDITIONAL INFORMATION

● Semiconductor Location

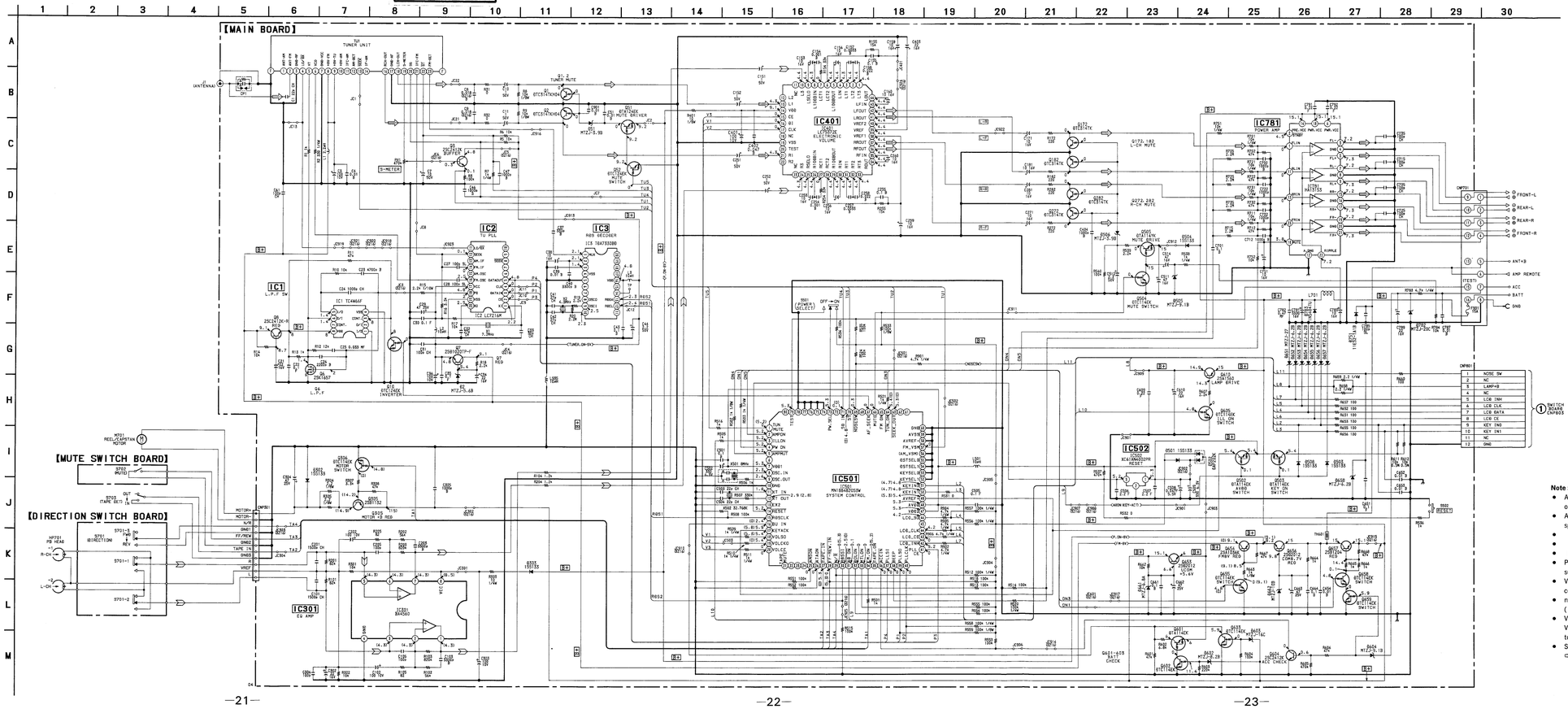
Ref. No.	Location	Ref. No.	Location
D2	D-8	IC781	B-7
D51	F-5		
D302	H-9	Q1	F-5
D303	F-8	Q2	F-5
D501	I-3	Q3	H-9
D502	I-2	Q6	E-9
D503	I-4	Q7	D-9
D504	D-3	Q8	D-9
D505	D-5	Q10	D-10
D506	D-5	Q51	F-4
D508	I-5	Q52	F-4
D602	D-3	Q172	C-8
D603	D-3	Q182	C-8
D604	D-4	Q272	C-7
D651	H-6	Q282	C-7
D652	H-5	Q305	H-8
D653	H-5	Q306	H-8
D654	H-5	Q502	I-3
D655	H-5	Q503	H-4
D656	H-5	Q504	D-5
D657	H-4	Q505	D-5
D658	H-6	Q601	E-3
D661	C-2	Q602	E-3
D662	C-3	Q603	D-3
D751	C-6	Q604	D-4
D782	D-5	Q605	H-2
D783	B-3	Q610	H-3
		Q653	C-2
IC1	D-10	Q654	D-2
IC2	F-8	Q655	D-2
IC3	H-7	Q656	C-2
IC301	G-9	Q657	C-3
IC401	E-7	Q658	D-3
IC501	G-3	Q659	D-2
IC502	I-3		

Note :
● ○— : parts extracted from the component side.

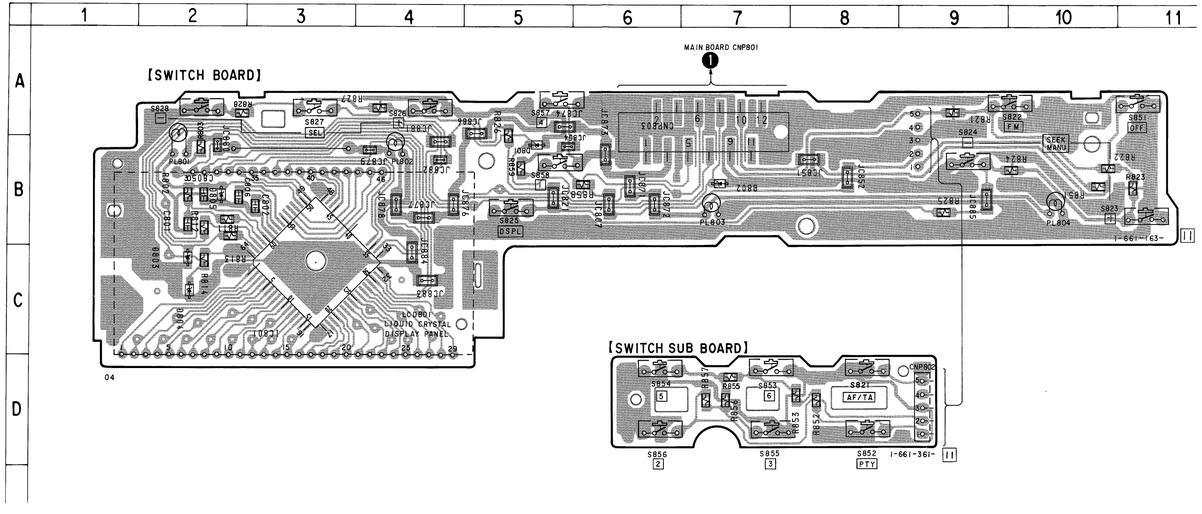


5-3. SCHEMATIC DIAGRAM—MAIN SECTION— • Refer to page 29 for IC Block Diagrams.

SEE ADDITIONAL INFORMATION



5-4. PRINTED WIRING BOARD—PANEL SECTION—



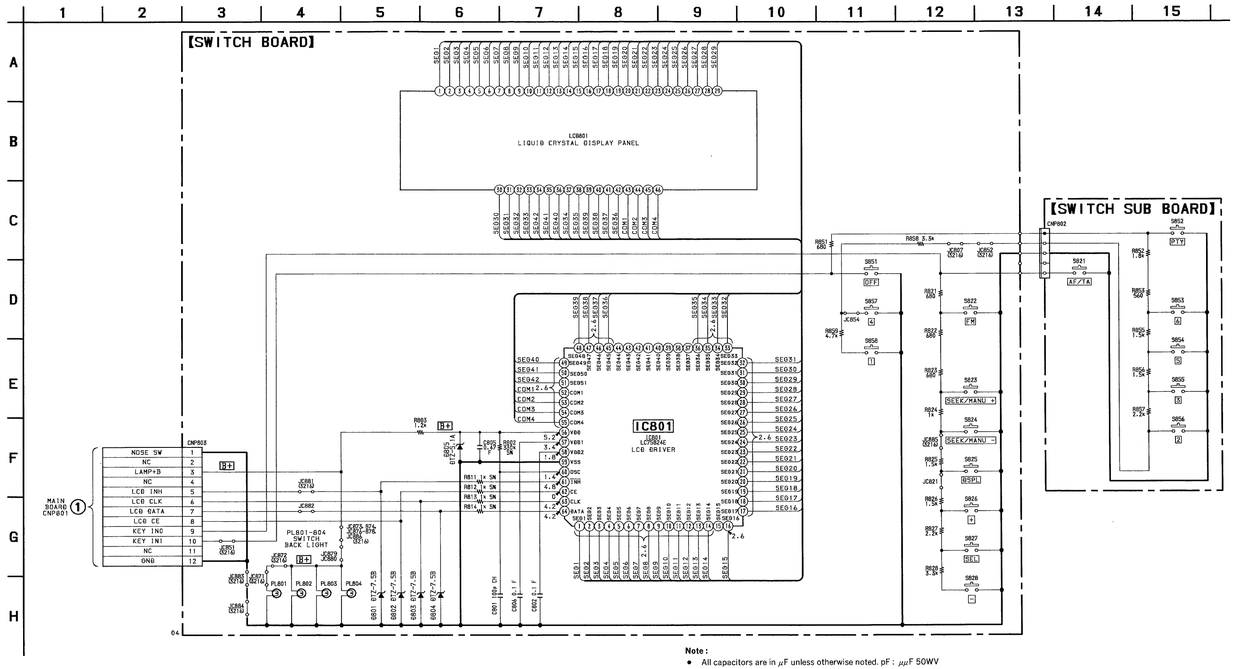
• Semiconductor Location

Ref. No.	Location
D801	B-5
D802	B-7
D803	C-2
D804	C-2
D805	B-2
IC801	C-3

Note :

- ○— : parts extracted from the component side.

5-5. SCHEMATIC DIAGRAM—PANEL SECTION—

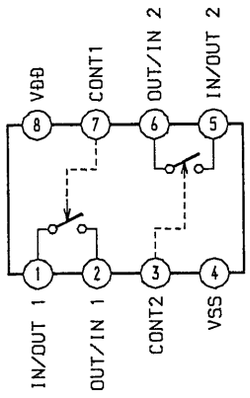


Note :

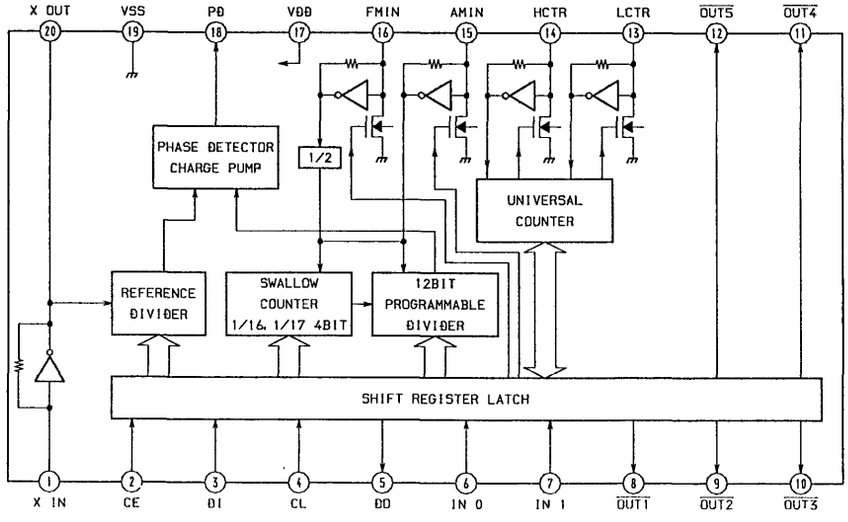
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- B+ : B+ Line
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

• **IC Block Diagrams**

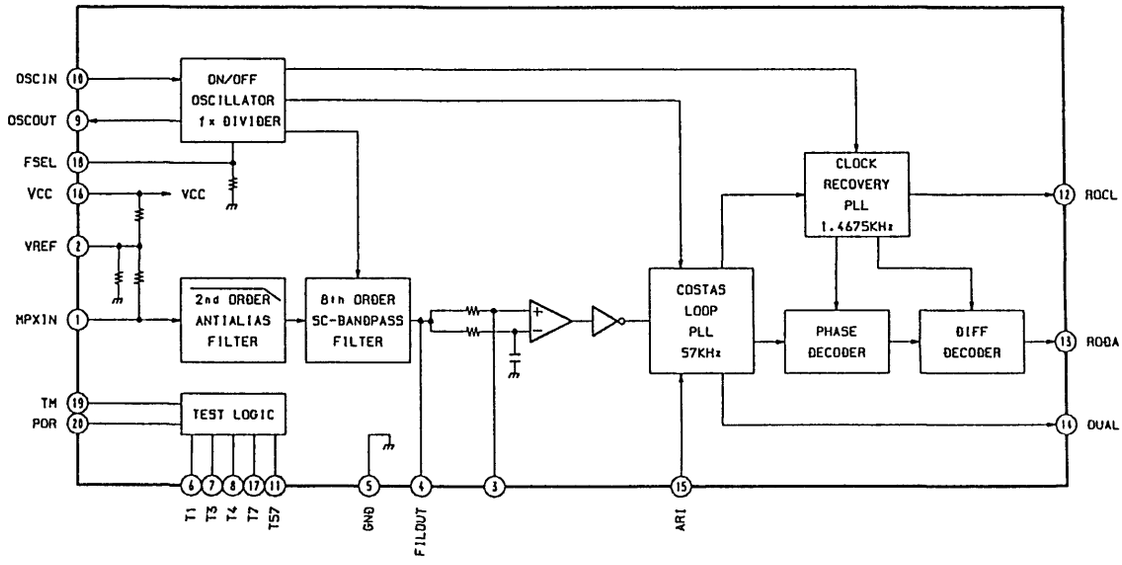
IC1 TC4W66F



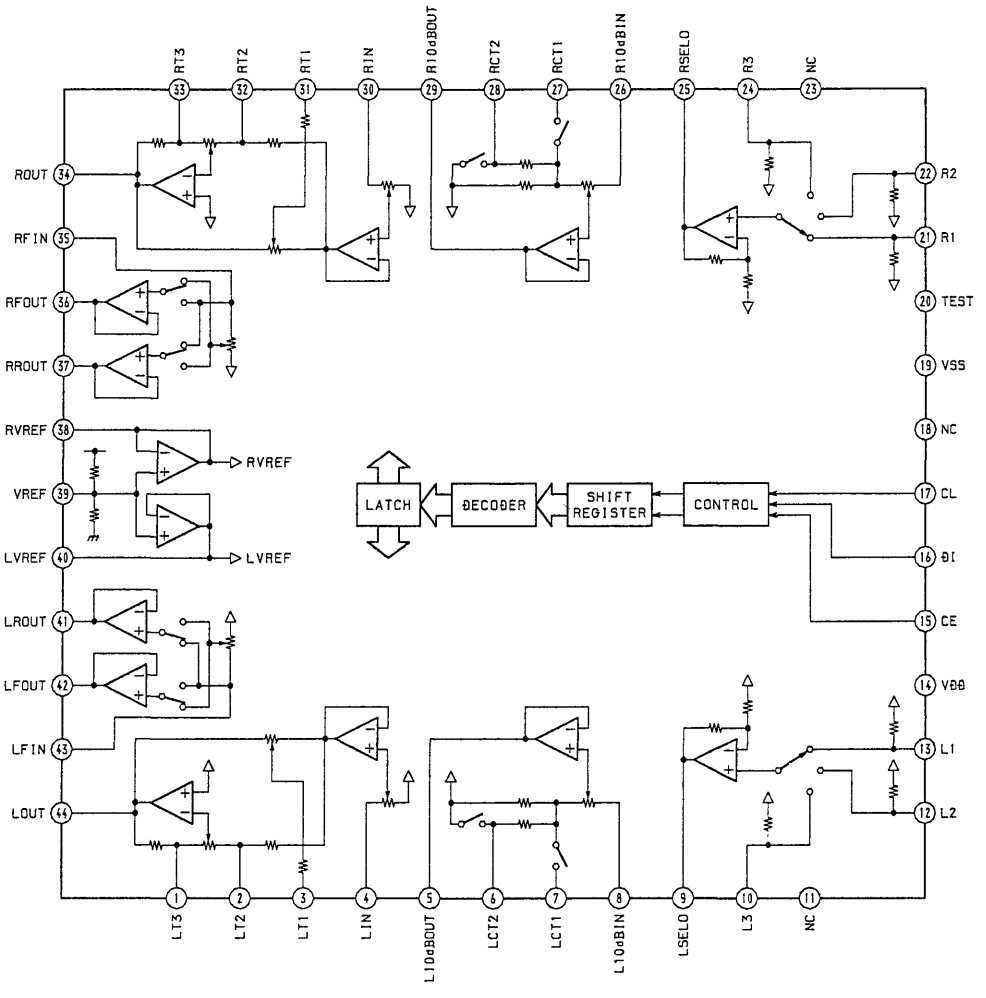
IC2 LC7216M



IC3 TDA7330BD



IC401 LC75372E



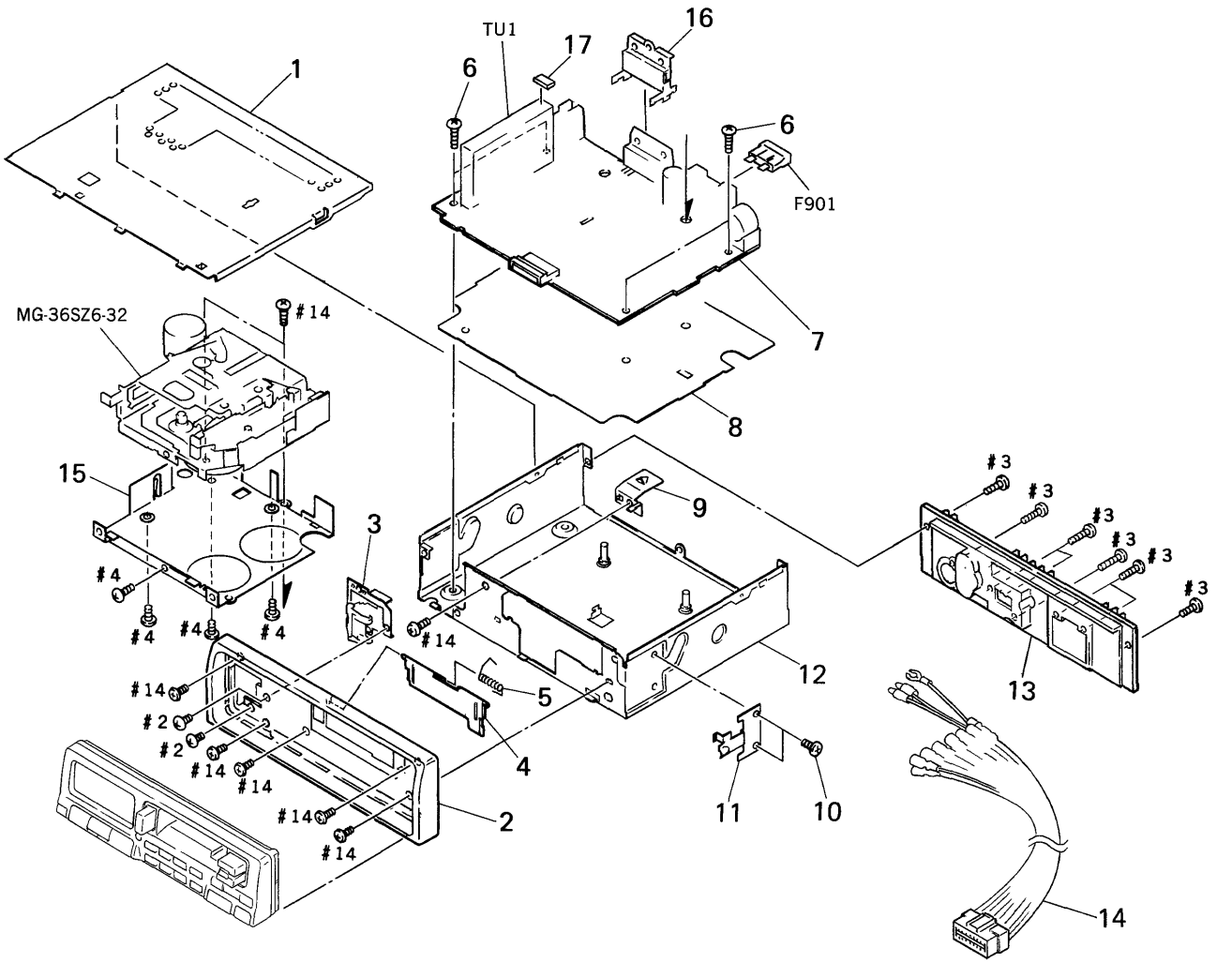
SECTION 6
EXPLODED VIEWS

SEE ADDITIONAL INFORMATION

NOTE:

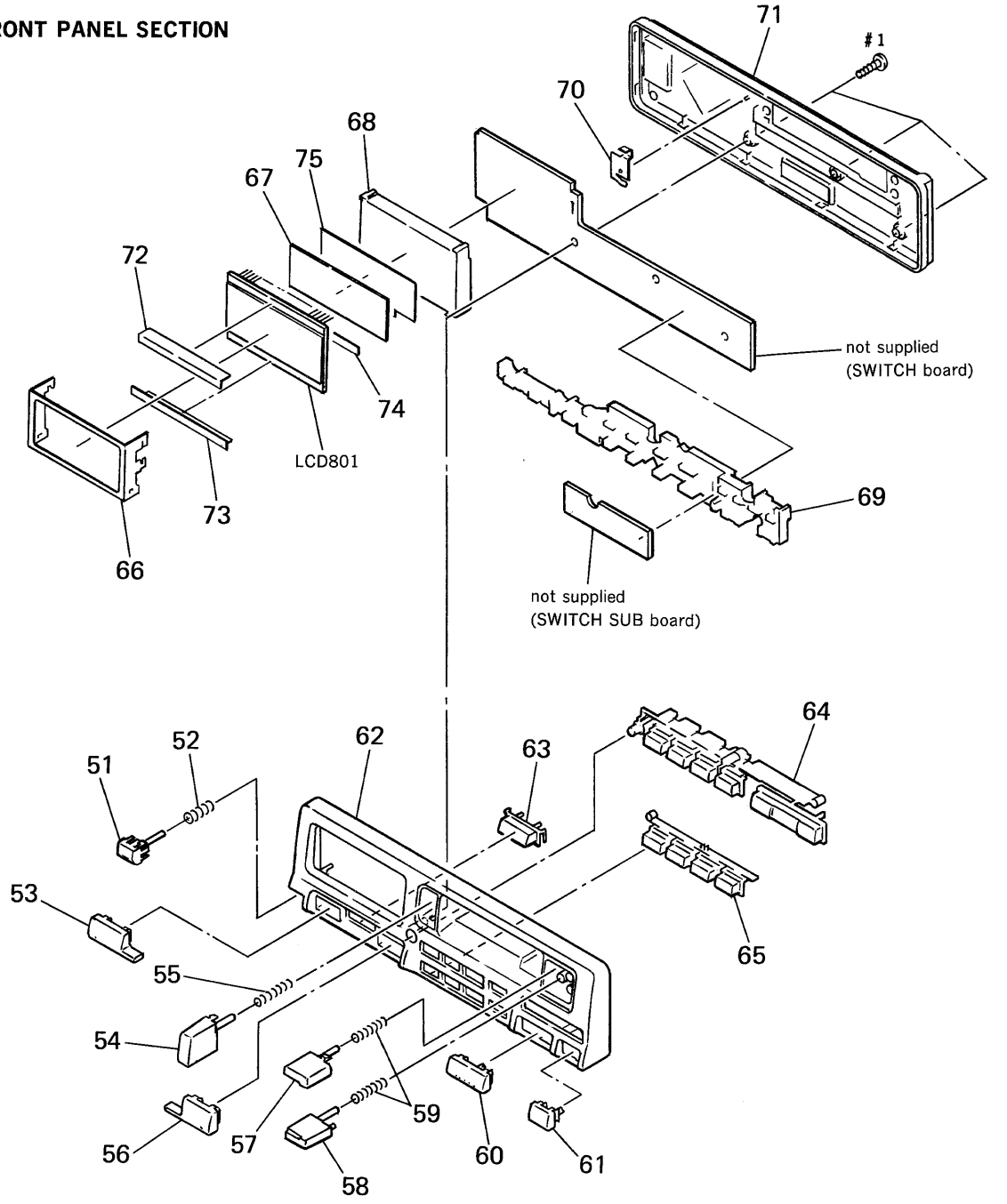
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

6-1. CHASSIS SECTION



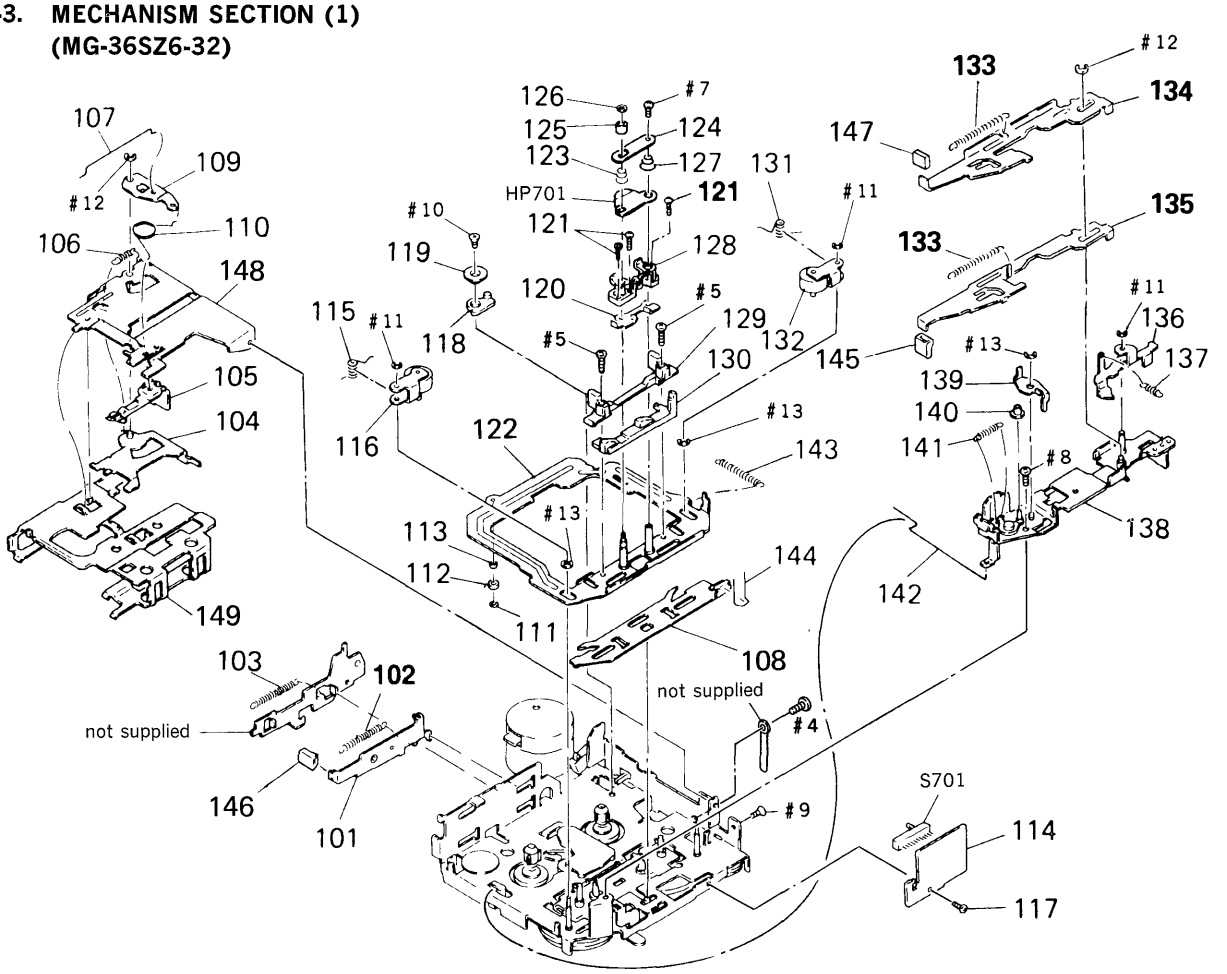
Ref. No.	Part No.	Description	Remark
* 1	3-922-517-01	COVER	
2	3-933-161-01	PANEL, SUB	
3	X-3367-636-1	LOCK ASSY	
4	3-924-404-21	DOOR, CASSETTE	
5	3-377-892-01	SPRING (C DOOR), TORSION	
6	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
* 7	A-3309-140-A	MAIN BOARD, COMPLETE	
* 8	3-922-512-01	INSULATOR	
* 9	3-909-089-01	PLATE, LOCK	
10	3-344-561-21	SCREW (M4X4)	
* 11	3-909-090-01	PLATE (R), LOCK	
* 12	X-3369-999-1	CHASSIS ASSY	
* 13	3-932-425-11	HEAT SINK	
14	1-769-625-21	CORD (WITH CONNECTOR)	
* 15	3-924-507-01	BRACKET (MD)	
16	3-931-260-01	BRACKET (IC)	
17	9-911-840-XX	CUSHION (U)	
F901	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
TU1	1-473-635-11	TUNER UNIT	

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-926-938-01	BUTTON (RELEASE)	
52	3-375-372-01	SPRING (RELEASE)	
53	3-926-937-01	BUTTON (-)	
54	3-922-505-01	BUTTON (EJECT)	
55	3-922-513-01	SPRING (EJECT), COMPRESSION	
56	3-926-935-01	BUTTON (+)	
57	3-922-506-01	BUTTON (FF)	
58	3-922-507-01	BUTTON (REW)	
59	3-922-514-01	SPRING (F/R), COMPRESSION	
60	3-926-932-11	BUTTON (TUNER)	
61	3-926-931-01	BUTTON (OFF)	
62	3-926-927-41	PANEL, FRONT	
63	3-926-936-01	BUTTON (SEL)	
64	3-926-929-11	BUTTON (PTY)	
65	3-926-930-21	BUTTON (AF/TA)	
* 66	3-922-522-01	PLATE (LCD), GROUND	
* 67	3-932-424-01	SHEET (REFLECTOR)	
* 68	3-932-423-01	PLATE (LCD), LIGHT GUIDE	
* 69	3-927-458-01	PLATE (BUTTON), LIGHT GUIDE	
* 70	3-922-523-01	PLATE (F/S), GROUND	
71	3-933-163-01	PANEL, FRONT BACK	
* 72	3-935-346-01	INSULATION (LCD)	
* 73	3-934-917-01	INSULATION (LCD)	
* 74	3-934-916-01	PLATE (LCD), LIGHT INTERCEPTION	
* 75	3-934-915-01	SHEET (ILLUMINATOR)	
LCD801	1-801-232-11	DISPLAY PANEL, LIQUID CRYSTAL	

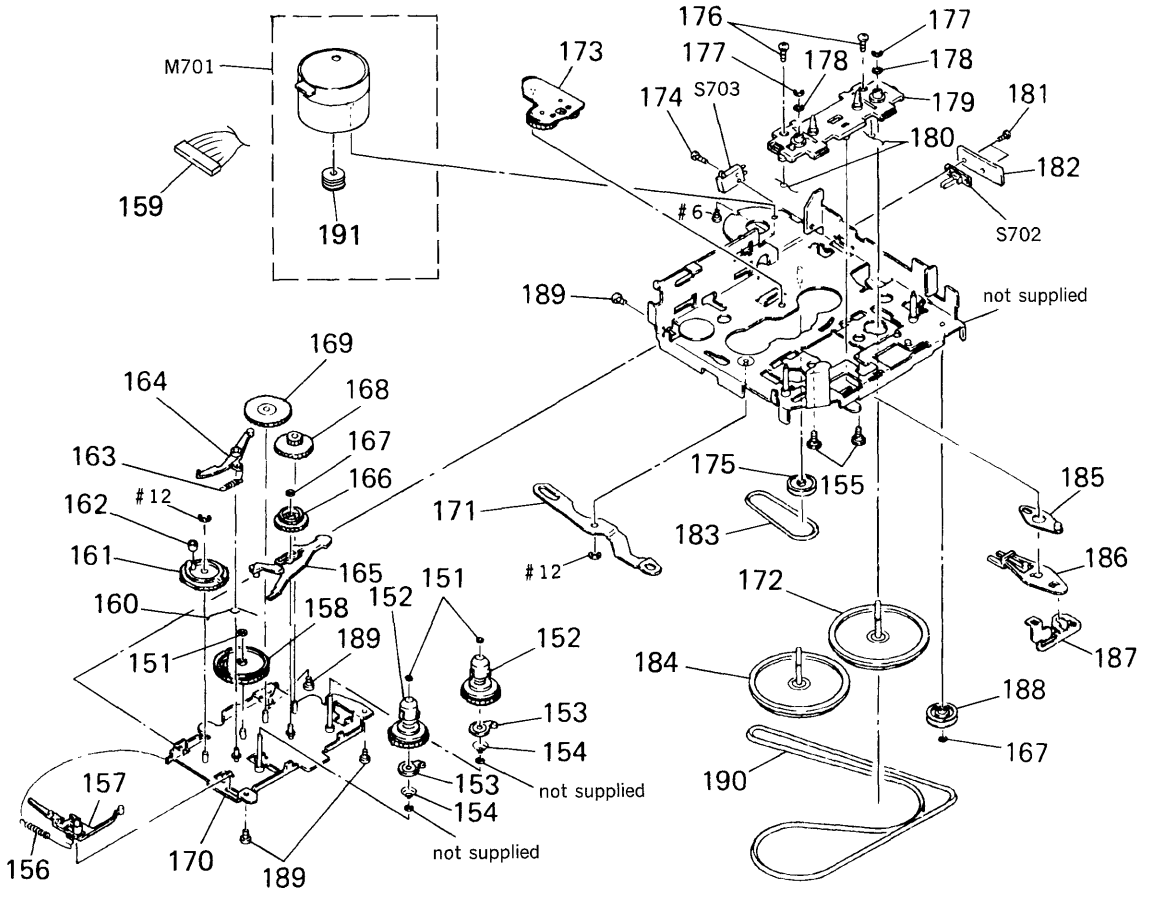
6-3. MECHANISM SECTION (1) (MG-36SZ6-32)



Ref. No.	Part No.	Description	Remark
* 101	3-379-144-01	LEVER (S), EJECT	
102	3-392-950-01	SPRING	
103	3-392-951-01	SPRING	
* 104	3-392-921-01	LOCK ASSY, EJECT CAM	
105	3-392-972-01	HOOKER, TAPE	
106	3-392-953-01	SPRING	
107	3-392-969-01	LINK, RETURN	
* 108	3-392-919-01	ARM ASSY, F, R SELECTION	
* 109	3-392-932-01	PLATE, CENTER	
110	3-392-961-01	SPRING (B)	
111	3-570-615-00	POLY-WASHER (DIA. 1.2)	
112	3-392-945-01	ROLLER (A), H.P	
113	3-392-942-01	ROLLER (B), H.P	
114	3-392-970-01	CHASSIS, SWITCH (DIRECTION SWITCH BOARD)	
115	3-392-958-01	SPRING (R)	
116	3-375-378-01	ARM (R) ASSY, PINCH	
* 117	4-908-792-11	SCREW (B2)	
118	3-372-244-01	ARM (N), MUTE	
* 119	3-397-427-01	COLLAR, MUTE ARM	
120	3-377-908-01	SHIM (X), ADJUSTOR	
121	3-375-379-01	SCREW, AZIMUTH	
* 122	3-392-975-05	PLATE ASSY (S), HEAD	
123	3-392-956-01	SPRING (A)	
* 124	3-392-930-01	RETAINER, SPRING	
125	3-392-943-01	ROLLER, FF	
126	3-676-387-00	POLY-SLIDER (DIA. 1.6)	

Ref. No.	Part No.	Description	Remark
127	3-392-955-01	SPRING (A)	
* 128	3-379-142-01	ARM (B), ADJUSTOR	
129	3-392-984-02	GUIDE, TAPE	
130	3-377-909-02	LINK (X), ADJUSTOR	
131	3-392-957-01	SPRING (F)	
132	3-375-377-01	ARM (F) ASSY, PINCH	
133	3-392-948-01	SPRING	
* 134	3-379-145-01	LEVER (S), FF	
* 135	3-379-146-01	LEVER (S), REW	
* 136	3-392-935-01	ARM, LOCK	
137	3-392-917-01	SPRING	
* 138	3-372-242-01	BRACKET ASSY (D), LEVER	
* 139	3-392-933-01	LEVER (B), CHANGE	
140	3-392-994-01	ROLLER, PROGRAM	
141	3-392-954-01	SPRING	
142	3-372-243-01	LINK (B), SELECTOR	
143	3-392-952-01	SPRING	
144	3-392-962-01	SPRING	
* 145	3-379-139-01	BUTTON, REW	
* 146	3-379-140-01	BUTTON, EJECT	
* 147	3-379-141-01	BUTTON, FF	
148	3-375-383-01	HANGER (X), CASSETTE	
149	3-375-384-01	HOLDER (X), CASSETTE	
HP701	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	
S701	1-692-502-11	SWITCH, SLIDE (DIRECTION)	

6-4. MECHANISM SECTION (2)
(MG-36SZ6-32)



Ref. No.	Part No.	Description	Remark
151	3-676-387-00	POLY-SLIDER (DIA. 1.6)	
152	3-376-196-01	SPINDLE ASSY (S), REEL	
153	3-375-380-01	CAM ASSY, DETECTION	
154	3-370-619-01	SPRING, BACK TENSION	
155	3-392-918-01	SCREW, EJECT HOOK	
156	3-392-959-01	SPRING	
157	3-392-985-02	RATCHET	
158	3-392-990-01	GEAR, DETECTION	
159	3-387-912-01	CONNECTOR ASSY, 11P	
160	3-392-960-01	SPRING	
161	3-392-987-01	GEAR, SELECTOR	
162	3-392-944-01	COLLAR (SELECTOR GEAR)	
163	3-375-131-01	SPRING, GEAR LOCK ARM	
164	3-392-989-02	ARM, GEAR LOCK	
165	3-392-986-01	ARM, SENSOR	
166	3-392-915-01	GEAR, IDLE	
167	3-570-615-00	POLY-WASHER (DIA. 1.2)	
168	3-392-936-01	GEAR (A)	
169	3-392-937-01	GEAR (B)	
* 170	3-392-976-01	BASE ASSY, REEL	
* 171	3-392-979-01	LEVER, REVERSE	
172	3-392-926-02	FLYWHEEL ASSY (BF)	

Ref. No.	Part No.	Description	Remark
173	3-392-916-01	ARM ASSY, TU GEAR	
174	3-318-203-11	SCREW (B1.7X6), TAPPING	
175	3-392-938-01	GEAR, PULLY	
176	3-318-204-81	SCREW (M1.7X3), TAPPING	
177	3-590-768-00	RING (A), E	
178	3-701-437-11	POLY-SLIDER (A)	
* 179	3-375-381-01	BRACKET ASSY (X), CM	
180	3-392-963-01	SPRING (R)	
181	3-318-204-91	SCREW (M1.7X4), TAPPING	
182	3-375-376-01	MUTE (PWB) (MUTE SWITCH BOARD)	
183	3-375-375-02	BELT (C), SUB	
184	3-392-995-02	FLYWHEEL ASSY (BR)	
* 185	3-392-925-01	ARM (A) ASSY, F.R	
* 186	3-392-939-01	ARM, FF	
* 187	3-392-934-01	ARM (B), F.R	
188	3-392-941-01	PULLEY (A), IDLE	
* 189	4-908-792-11	SCREW (B2)	
190	3-392-967-01	BELT, MAIN	
* 191	3-392-913-01	PULLEY, MOTOR	
M701	X-3364-496-1	MOTOR ASSY (REEL/CAPSTAN)	
S702	1-692-065-11	SWITCH, LEAF (MUTE)	
S703	1-554-790-21	SWITCH, POWER (TAPE DET)	

SEE ADDITIONAL INFORMATION

SECTION 7
ELECTRICAL PARTS LIST

MAIN

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA ..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3309-140-A	MAIN BOARD, COMPLETE			
		**********			
*	3-931-260-01	BRACKET (IC)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3	1-126-933-11	ELECT	100uF	20%	10V
C4	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C7	1-126-964-11	ELECT	10uF	20%	50V
C8	1-163-062-00	CERAMIC CHIP	0.018uF	10%	50V
C9	1-163-062-00	CERAMIC CHIP	0.018uF	10%	50V
C10	1-124-903-11	ELECT	1uF	20%	50V
C11	1-124-903-11	ELECT	1uF	20%	50V
C21	1-124-234-00	ELECT	22uF	20%	16V
C22	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C23	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C24	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C25	1-136-159-00	FILM	0.033uF	5%	50V
C26	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C27	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C29	1-104-664-11	ELECT	47uF	20%	25V
C30	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C31	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C32	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C33	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C34	1-124-234-00	ELECT	22uF	20%	16V
C35	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C36	1-124-584-00	ELECT	100uF	20%	10V
C37	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C38	1-126-157-11	ELECT	10uF	20%	16V
C39	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C40	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C41	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C42	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C43	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C44	1-124-257-00	ELECT	2.2uF	20%	50V
C46	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C47	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C51	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C61	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C101	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C102	1-124-584-00	ELECT	100uF	20%	10V
C103	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	100V
C105	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C151	1-126-160-11	ELECT	1uF	20%	50V
C152	1-126-160-11	ELECT	1uF	20%	50V
C153	1-126-157-11	ELECT	10uF	20%	16V
C154	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C155	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C156	1-126-157-11	ELECT	10uF	20%	16V
C157	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C158	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C159	1-126-157-11	ELECT	10uF	20%	16V
C160	1-126-157-11	ELECT	10uF	20%	16V
C171	1-126-157-11	ELECT	10uF	20%	16V
C181	1-126-157-11	ELECT	10uF	20%	16V
C201	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C202	1-124-584-00	ELECT	100uF	20%	10V
C203	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	100V
C205	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C251	1-126-160-11	ELECT	1uF	20%	50V
C252	1-126-160-11	ELECT	1uF	20%	50V
C253	1-126-157-11	ELECT	10uF	20%	16V
C254	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C255	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C256	1-126-157-11	ELECT	10uF	20%	16V
C257	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C258	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C259	1-126-157-11	ELECT	10uF	20%	16V
C260	1-126-157-11	ELECT	10uF	20%	16V
C271	1-126-157-11	ELECT	10uF	20%	16V
C281	1-126-157-11	ELECT	10uF	20%	16V
C302	1-124-234-00	ELECT	22uF	20%	16V
C303	1-126-933-11	ELECT	100uF	20%	10V
C304	1-104-664-11	ELECT	47uF	20%	25V
C305	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C306	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C401	1-124-584-00	ELECT	100uF	20%	10V

MAIN

SEE ADDITIONAL INFORMATION

Ref. No.	Part No.	Description			Remark
C402	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C403	1-124-234-00	ELECT	22uF	20%	16V
C404	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C502	1-126-541-11	ELECT	330uF	20%	25V
C503	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C504	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C505	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C506	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C507	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C508	1-125-701-11	CAPACITOR	0.047F		5.5V
C509	1-128-057-11	ELECT	330uF	20%	6.3V
C511	1-124-589-11	ELECT	47uF	20%	16V
C512	1-124-257-00	ELECT	2.2uF	20%	50V
C514	1-124-589-11	CERAMIC CHIP	47uF	20%	16V
C609	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C610	1-124-234-00	ELECT	22uF	20%	16V
C651	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C652-654					
	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C661	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C662	1-104-664-11	ELECT	47uF	20%	25V
C663	1-104-664-11	ELECT	47uF	20%	25V
C664	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C701	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C702	1-164-004-11	CERAMIC CHIP	0.001uF	10%	50V
C705	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C712	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C715	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C722	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C725	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C732	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C735	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C751	1-126-157-11	ELECT	10uF	20%	16V
C781	1-126-936-11	ELECT	3300uF	20%	16V
C782	1-136-173-00	FILM	0.47uF	5%	50V
C783	1-126-157-11	ELECT	10uF	20%	16V
C785	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C787	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C789	1-124-234-00	ELECT	22uF	20%	16V
C791	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C792	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C901	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
* CNP301	1-506-993-11	PIN, CONNECTOR (PC BOARD) 11P			
CNP701	1-774-701-11	PIN, CONNECTOR 16P			
CNP801	1-764-422-11	PLUG, CONNECTOR 12P			

Ref. No.	Part No.	Description	Remark
		< DISCHARGE GAP >	
CP1	1-519-504-11	GAP, DISCHARGE	
		< DIODE >	
D2	8-719-109-89	DIODE RD5.6ESB2	
D51	8-719-109-72	DIODE RD3.9ES-B2	
D302	8-719-991-33	DIODE 1SS133T-77	
D303	8-719-991-33	DIODE 1SS133T-77	
D501	8-719-991-33	DIODE 1SS133T-77	
D502	8-719-914-44	DIODE DAP202K	
D503	8-719-991-33	DIODE 1SS133T-77	
D504	8-719-991-33	DIODE 1SS133T-77	
D505	8-719-110-13	DIODE RD9.1ESB2	
D506	8-719-109-72	DIODE RD3.9ES-B2	
D508	8-719-991-33	DIODE 1SS133T-77	
D602	8-719-110-08	DIODE RD8.2ES-B2	
D603	8-719-923-93	DIODE MTZJ-T-77-16C	
D604	8-719-110-13	DIODE RD9.1ESB2	
D651	8-719-982-13	DIODE MTZJ-27	
D652	8-719-109-93	DIODE RD6.2ESB2	
D653	8-719-109-93	DIODE RD6.2ESB2	
D654	8-719-109-93	DIODE RD6.2ESB2	
D655	8-719-109-93	DIODE RD6.2ESB2	
D656	8-719-109-93	DIODE RD6.2ESB2	
D657	8-719-109-93	DIODE RD6.2ESB2	
D658	8-719-109-93	DIODE RD6.2ESB2	
D661	8-719-109-97	DIODE RD6.8ESB2	
D662	8-719-110-17	DIODE RD10ESB2	
D751	8-719-200-82	DIODE 11ES2	
D782	8-719-110-53	DIODE RD20ES-B2	
D783	8-719-052-59	DIODE 1N5404TU-15	
		< FUSE >	
F901	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
		< IC >	
IC1	8-759-242-66	IC TC4W66F	
IC2	8-759-823-81	IC LC7216M	
IC3	8-759-163-63	IC TDA7330BD-013TR	
IC301	8-759-924-46	IC BA4560F	
IC401	8-759-368-11	IC LC75372E	
IC501	8-759-372-62	IC MN1884820S3W	
IC502	8-759-363-81	IC XC61AN4002PR	
IC781	8-759-369-42	IC HA13153	
		< JACK >	
J1	1-764-808-11	JACK (ANTENNA)	

SEE ADDITIONAL INFORMATION

MAIN

Ref.No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JC1	1-216-295-00	METAL CHIP	0	5%	1/10W
JC2	1-216-295-00	METAL CHIP	0	5%	1/10W
JC3-6					
	1-216-296-00	METAL CHIP	0	5%	1/8W
JC7-13					
	1-216-295-00	METAL CHIP	0	5%	1/10W
JC21	1-216-295-00	METAL CHIP	0	5%	1/10W
JC22	1-216-296-00	METAL CHIP	0	5%	1/8W
JC301	1-216-295-00	METAL CHIP	0	5%	1/10W
JC302	1-216-296-00	METAL CHIP	0	5%	1/8W
JC303	1-216-296-00	METAL CHIP	0	5%	1/8W
JC304	1-216-295-00	METAL CHIP	0	5%	1/10W
JC401	1-216-295-00	METAL CHIP	0	5%	1/10W
JC501	1-216-296-00	METAL CHIP	0	5%	1/8W
JC502	1-216-296-00	METAL CHIP	0	5%	1/8W
JC503	1-216-295-00	METAL CHIP	0	5%	1/10W
JC601	1-216-296-00	METAL CHIP	0	5%	1/8W
JC901	1-216-295-00	METAL CHIP	0	5%	1/10W
JC902	1-216-296-00	METAL CHIP	0	5%	1/8W
JC903-906					
	1-216-295-00	METAL CHIP	0	5%	1/10W
JC907	1-216-296-00	METAL CHIP	0	5%	1/8W
JC908	1-216-296-00	METAL CHIP	0	5%	1/8W
JC909	1-216-295-00	METAL CHIP	0	5%	1/10W
JC910	1-216-296-00	METAL CHIP	0	5%	1/8W
JC911	1-216-295-00	METAL CHIP	0	5%	1/10W
JC912	1-216-295-00	METAL CHIP	0	5%	1/10W
JC913	1-216-295-00	METAL CHIP	0	5%	1/10W
JC914	1-216-296-00	METAL CHIP	0	5%	1/8W
JC915	1-216-296-00	METAL CHIP	0	5%	1/8W
JC916	1-216-295-00	METAL CHIP	0	5%	1/10W
JC917	1-216-296-00	METAL CHIP	0	5%	1/8W
JC918	1-216-296-00	METAL CHIP	0	5%	1/8W
JC919	1-216-295-00	METAL CHIP	0	5%	1/10W
JC920	1-216-296-00	METAL CHIP	0	5%	1/8W
JC921	1-216-296-00	METAL CHIP	0	5%	1/8W
JC922	1-216-295-00	METAL CHIP	0	5%	1/10W
JC923	1-216-295-00	METAL CHIP	0	5%	1/10W
JC924	1-216-296-00	METAL CHIP	0	5%	1/8W
JC925	1-216-296-00	METAL CHIP	0	5%	1/8W
		< COIL >			
L1	1-410-501-11	INDUCTOR	2.2uH		
L2	1-410-509-11	INDUCTOR	10uH		
L3	1-410-509-11	INDUCTOR	10uH		
L501	1-410-509-11	INDUCTOR	10uH		
L701	1-411-669-11	COIL, CHOKE			

Ref.No.	Part No.	Description			Remark
L935	1-410-509-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q2	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q3	8-729-920-74	TRANSISTOR	2SC2412K-QR		
Q6	8-729-021-94	TRANSISTOR	2SK1657-T1B		
Q7	8-729-102-14	TRANSISTOR	2SD1021		
Q8	8-729-920-74	TRANSISTOR	2SC2412K-QR		
Q10	8-729-901-00	TRANSISTOR	DTC124EK		
Q51	8-729-901-05	TRANSISTOR	DTA124EK		
Q52	8-729-901-00	TRANSISTOR	DTC124EK		
Q172	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q182	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q272	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q282	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q305	8-729-106-60	TRANSISTOR	2SB1115A		
Q306	8-729-900-53	TRANSISTOR	DTC114EK		
Q502	8-729-901-04	TRANSISTOR	DTA114EK		
Q503	8-729-901-04	TRANSISTOR	DTA114EK		
Q504	8-729-900-53	TRANSISTOR	DTC114EK		
Q505	8-729-901-46	TRANSISTOR	DTA114YK		
Q601	8-729-901-04	TRANSISTOR	DTA114EK		
Q602	8-729-900-53	TRANSISTOR	DTC114EK		
Q603	8-729-900-53	TRANSISTOR	DTC114EK		
Q604	8-729-920-74	TRANSISTOR	2SC2412K-QR		
Q605	8-729-900-53	TRANSISTOR	DTC114EK		
Q610	8-729-016-02	TRANSISTOR	2SA1560-TL2-Q		
Q653	8-729-209-15	TRANSISTOR	2SD2012		
Q654	8-729-901-97	TRANSISTOR	2SA1036K-Q		
Q655	8-729-900-53	TRANSISTOR	DTC114EK		
Q656	8-729-209-15	TRANSISTOR	2SD2012		
Q657	8-729-822-78	TRANSISTOR	2SB1204		
Q658	8-729-900-53	TRANSISTOR	DTC114EK		
Q659	8-729-900-53	TRANSISTOR	DTC114EK		
		< RESISTOR >			
R1	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R2	1-249-411-11	CARBON	330	5%	1/4W
R3	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R5	1-216-073-00	METAL CHIP	10K	5%	1/10W
R6	1-216-073-00	METAL CHIP	10K	5%	1/10W
R7	1-249-417-11	CARBON	1K	5%	1/4W
R8	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R9	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R12	1-216-075-00	METAL CHIP	12K	5%	1/10W

MAIN

SEE ADDITIONAL INFORMATION

Ref. No.	Part No.	Description			Remark
R13	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R14	1-216-073-00	METAL CHIP	10K	5%	1/10W
R15	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R16	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R17	1-216-073-00	METAL CHIP	10K	5%	1/10W
R18	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R19	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R20	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R31	1-216-295-00	METAL CHIP	0	5%	1/10W
R32	1-216-295-00	METAL CHIP	0	5%	1/10W
R101	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R102	1-216-091-00	METAL CHIP	56K	5%	1/10W
R103	1-216-119-00	METAL GLAZE	820K	5%	1/10W
R104	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R105	1-216-023-00	METAL GLAZE	82	5%	1/10W
R154	1-216-085-00	METAL CHIP	33K	5%	1/10W
R155	1-216-077-00	METAL CHIP	15K	5%	1/10W
R172	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-033-00	METAL CHIP	220	5%	1/10W
R201	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R202	1-216-091-00	METAL CHIP	56K	5%	1/10W
R203	1-216-119-00	METAL GLAZE	820K	5%	1/10W
R204	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R205	1-216-023-00	METAL GLAZE	82	5%	1/10W
R254	1-216-085-00	METAL CHIP	33K	5%	1/10W
R255	1-216-077-00	METAL CHIP	15K	5%	1/10W
R272	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-033-00	METAL CHIP	220	5%	1/10W
R301	1-216-073-00	METAL CHIP	10K	5%	1/10W
R302	1-216-073-00	METAL CHIP	10K	5%	1/10W
R303	1-249-393-11	CARBON	10	5%	1/4W
R304	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R305	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R307	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R308	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R401	1-216-150-00	METAL GLAZE	10	5%	1/8W
R501	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R502	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R503	1-249-417-11	CARBON	1K	5%	1/4W
R505	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R506	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R507	1-216-109-00	METAL CHIP	330K	5%	1/10W
R508	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R509-511					
	1-249-417-11	CARBON	1K	5%	1/4W
R512	1-249-441-11	CARBON	100K	5%	1/4W
R513-515					
	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R516	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R518	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R520	1-249-441-11	CARBON	100K	5%	1/4W
R521	1-249-417-11	CARBON	1K	5%	1/4W
R524	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R531	1-216-295-00	CONDUCTOR, CHIP		(2012)	
R532	1-216-295-00	CONDUCTOR, CHIP		(2012)	
R533	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R534	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R535	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R536	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R537	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R538	1-249-417-11	CARBON	1K	5%	1/4W
R539	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R540	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R551-555					
	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R556-558					
	1-249-441-11	CARBON	100K	5%	1/4W
R559	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R601	1-216-089-00	METAL CHIP	47K	5%	1/10W
R602	1-216-218-00	METAL CHIP	6.8K	5%	1/10W
R603	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R604	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R605	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R606	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R607	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R611	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R612	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R651-653					
	1-216-025-00	METAL GLAZE	100	5%	1/10W
R655-657					
	1-216-025-00	METAL GLAZE	100	5%	1/10W
R658	1-249-385-11	CARBON	2.2	5%	1/6W
R659	1-249-385-11	CARBON	2.2	5%	1/6W
R660	1-216-025-00	METAL GLAZE	100	5%	1/10W
R662	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R663	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R664	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R665	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R666	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R667	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R668	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-216-089-00	METAL CHIP	47K	5%	1/10W
R705	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R711	1-249-429-11	CARBON	10K	5%	1/4W
R712	1-216-089-00	METAL CHIP	47K	5%	1/10W
R715	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R721	1-249-429-11	CARBON	10K	5%	1/4W

SEE ADDITIONAL INFORMATION

MAIN SWITCH

Ref. No.	Part No.	Description			Remark
R722	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R725	1-216-129-00	METAL CHIP	2.2M	5% 1/10W	
R731	1-249-429-11	CARBON	10K	5% 1/4W	
R732	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R735	1-216-129-00	METAL CHIP	2.2M	5% 1/10W	
R751	1-249-429-11	CARBON	10K	5% 1/4W	
R752	1-249-429-11	CARBON	10K	5% 1/4W	
R783	1-249-425-11	CARBON	4.7K	5% 1/4W	
R784	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R901	1-249-425-11	CARBON	4.7K	5% 1/4W	
R902	1-249-425-11	CARBON	4.7K	5% 1/4W	
R904-906					
	1-249-425-11	CARBON	4.7K	5% 1/4W	
		< VARIABLE RESISTOR >			
RV1	1-238-605-31	RES, ADJ, CARBON 470K			
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S502	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR(POSITIVE) >			
TH601	1-809-148-11	THERMISTOR, POSITIVE			
		< TUNER >			
TU1	1-473-635-11	TUNER UNIT			
		< VIBRATOR >			
X1	1-577-126-51	VIBRATOR, CRYSTAL (7.2MHz)			
X2	1-760-556-11	VIBRATOR, CRYSTAL (4.3MHz)			
X501	1-579-952-21	VIBRATOR, CERAMIC (8MHz)			
X502	1-567-098-61	VIBRATOR, CRYSTAL (32.768kHz)			

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SWITCH BOARD

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*	3-922-522-01	PLATE (LCD), GROUND			
*	3-932-423-01	PLATE (LCD), LIGHT GUIDE			
*	3-932-424-01	SHEET (REFLECTOR)			
		< CAPACITOR >			
C801	1-163-251-11	CERAMIC CHIP	100PF	5% 50V	
C802	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C805	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C806	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
		< CONNECTOR >			
CNP803	1-764-423-11	PIN, CONNECTOR 12P			

Ref. No.	Part No.	Description			Remark
		< DIODE >			
D801	8-719-977-16	DIODE	DTZ7.5B		
D802	8-719-977-16	DIODE	DTZ7.5B		
D803	8-719-977-16	DIODE	DTZ7.5B		
D804	8-719-977-16	DIODE	DTZ7.5B		
D805	8-719-977-00	DIODE	DTZ5.1C		
		< IC >			
IC801	8-759-366-34	IC	LC75824E		
		< JUMPER RESISTOR >			
JC807	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC821	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC851	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC852	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC854	1-216-295-00	METAL CHIP	0	5% 1/10W	
JC871-874					
	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC876-878					
	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC879	1-216-295-00	METAL CHIP	0	5% 1/10W	
JC880	1-216-295-00	METAL CHIP	0	5% 1/10W	
JC881	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC882	1-216-295-00	METAL CHIP	0	5% 1/10W	
JC883-884					
	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC885	1-216-296-00	METAL CHIP	0	5% 1/8W	
JC886	1-216-296-00	METAL CHIP	0	5% 1/8W	
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-801-232-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL801-804					
	1-517-535-11	LAMP, PILOT			
		< RESISTOR >			
R802	1-216-109-00	METAL CHIP	330K	5% 1/10W	
R803	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R811-814					
	1-216-049-11	METAL GLAZE	1K	5% 1/10W	
R821-823					
	1-208-778-11	METAL GLAZE	680	0.50% 1/10W	
R824	1-208-782-11	METAL GLAZE	1K	0.50% 1/10W	
R825	1-208-786-11	METAL GLAZE	1.5K	0.50% 1/10W	
R826	1-208-786-11	METAL GLAZE	1.5K	0.50% 1/10W	
R827	1-208-790-11	METAL GLAZE	2.2K	0.50% 1/10W	
R828	1-208-794-11	METAL GLAZE	3.3K	0.50% 1/10W	
R851	1-208-778-11	METAL GLAZE	680	0.50% 1/10W	

SWITCH | SWITCH SUB

Ref. No.	Part No.	Description	Remark
R858	1-208-794-11	METAL GLAZE 3.3K 0.50% 1/10W	
R859	1-208-798-11	METAL GLAZE 4.7K 0.50% 1/10W	
		< SWITCH >	
S822	1-572-596-11	SWITCH, KEY BOARD (FM)	
S823	1-572-596-11	SWITCH, KEY BOARD (SEEK/MANU +)	
S824	1-572-596-11	SWITCH, KEY BOARD (SEEK/MANU -)	
S825	1-572-596-11	SWITCH, KEY BOARD (DSPL)	
S826	1-572-596-11	SWITCH, KEY BOARD (+)	
S827	1-572-596-11	SWITCH, KEY BOARD (SEL)	
S828	1-572-596-11	SWITCH, KEY BOARD (-)	
S851	1-572-596-11	SWITCH, KEY BOARD (OFF)	
S857	1-572-596-11	SWITCH, KEY BOARD (4)	
S858	1-572-596-11	SWITCH, KEY BOARD (1)	
		SWITCH SUB BOARD	
		< CONNECTOR >	
CNP802	1-774-934-11	PIN, CONNECTOR 5P	
		< RESISTOR >	
R852	1-208-788-11	METAL GLAZE 1.8K 0.50% 1/10W	
R853	1-208-776-11	METAL GLAZE 560 0.50% 1/10W	
R855	1-208-786-11	METAL GLAZE 1.5K 0.50% 1/10W	
R856	1-208-786-11	METAL GLAZE 1.5K 0.50% 1/10W	
R857	1-208-790-11	METAL GLAZE 2.2K 0.50% 1/10W	
		< SWITCH >	
S821	1-572-596-11	SWITCH, KEY BOARD (AF/TA)	
S852	1-572-596-11	SWITCH, KEY BOARD (PTY)	
S853	1-572-596-11	SWITCH, KEY BOARD (6)	
S854	1-572-596-11	SWITCH, KEY BOARD (5)	
S855	1-572-596-11	SWITCH, KEY BOARD (3)	
S856	1-572-596-11	SWITCH, KEY BOARD (2)	
		MISCELLANEOUS	
14	1-769-625-21	CORD (WITH CONNECTOR)	
F901	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
HP701	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	
M701	X-3364-496-1	MOTOR ASSY (REEL/CAPSTAN)	
S701	1-692-502-11	SWITCH, SLIDE (DIRECTION)	
S702	1-692-065-11	SWITCH, LEAF (MUTE)	
S703	1-554-790-21	SWITCH, POWER (TAPE DET)	

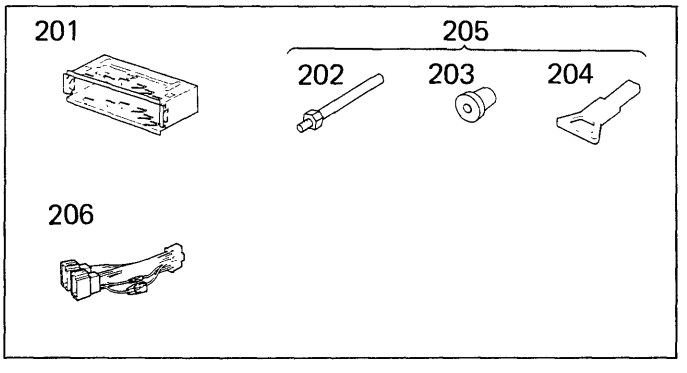
Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
	3-810-679-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN)	(AEP, UK, G)
	3-810-679-21	MANUAL, INSTRUCTION (SPANISH, PORTUGUESE, DUTCH, SWEDISH)	(AEP, UK)
	3-810-680-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN)	(AEP, UK, G)
	3-810-680-21	MANUAL, INSTRUCTION, INSTALL (SPANISH, PORTUGUESE, DUTCH, SWEDISH)	(AEP, UK)
	X-3367-692-3	CASE ASSY	

HARDWARE LIST

#1	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#2	7-621-772-10	SCREW +B 2X4	
#3	7-621-770-XX	SCREW +PTT 2.6X8 (S)	
#4	7-621-775-08	SCREW +P 2.6X3	
#5	7-627-553-88	SCREW, PRECISION +P 2X7	
#6	7-621-255-15	SCREW +P 2X3	
#7	7-621-255-20	SCREW +P 2X4	
#8	7-621-255-25	SCREW +PTT 2X4 (S)	
#9	7-621-555-10	SCREW +K 2X3	
#10	7-621-591-00	SCREW +K 2X4	
#11	7-624-102-04	STOP RING 1.5, TYPE -E	
#12	7-624-104-04	STOP RING 2.0, TYPE -E	
#13	7-624-118-01	RING, RETAINING E-2.5	
#14	7-621-773-95	SCREW +B 2.6X6	

SEE ADDITIONAL INFORMATION

Ref. No.	Part No.	Description	Remark
		MOUNTING HARDWARE	
		**********	
201	X-3367-691-1	FRAME ASSY, FITTING	
202	3-386-828-01	SCREW, FITTING	
203	3-349-410-01	BUSHING	
204	3-909-097-01	KEY	
205	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING	
206	1-769-625-21	CORD (WITH CONNECTOR)	



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Mobile Electronics Company

XR-3690RDS

SONY

SERVICE MANUAL

AEP Model
UK Model

SUPPLEMENT-1

File this supplement with the service manual.

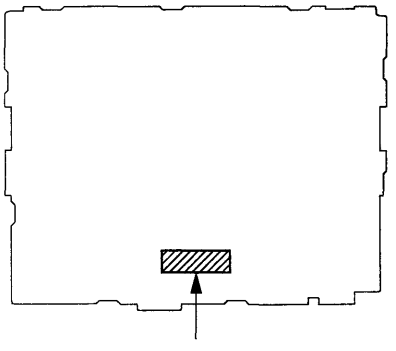
Subject :
Correction
Change of Main Board and Circuit due to Change of IC3

(ECN-CS601956)

IC3 is to be changed from TDA7330BD-013TR to SAA6579T. The main board is to be changed along with this change. Check the description of IC3 and the part No. of the main board when entering service and inspection.

• New/Former Discrimination

	Former Type	New Type
Description of IC3	TDA7330BD-013TR	SAA6579T
Part No. of Main board	1-660-310-□□	1-662-280-□□



Main Board Part No.

• **Correction**

☛ : **Corrected portion**

Page	INCORRECT				CORRECT		
	Ref.No.	Part No.	Description	Remark	Part No.	Description	Remark
31	14	1-769-625-21	CORD (WITH CONNECTOR)		1-776-527-31	CORD (WITH CONNECTOR) (ISO)	
41	204	3-909-097-01	KEY		3-388-078-01	KEY	
	206	1-769-625-21	CORD (WITH CONNECTOR)		1-776-527-31	CORD (WITH CONNECTOR) (ISO)	

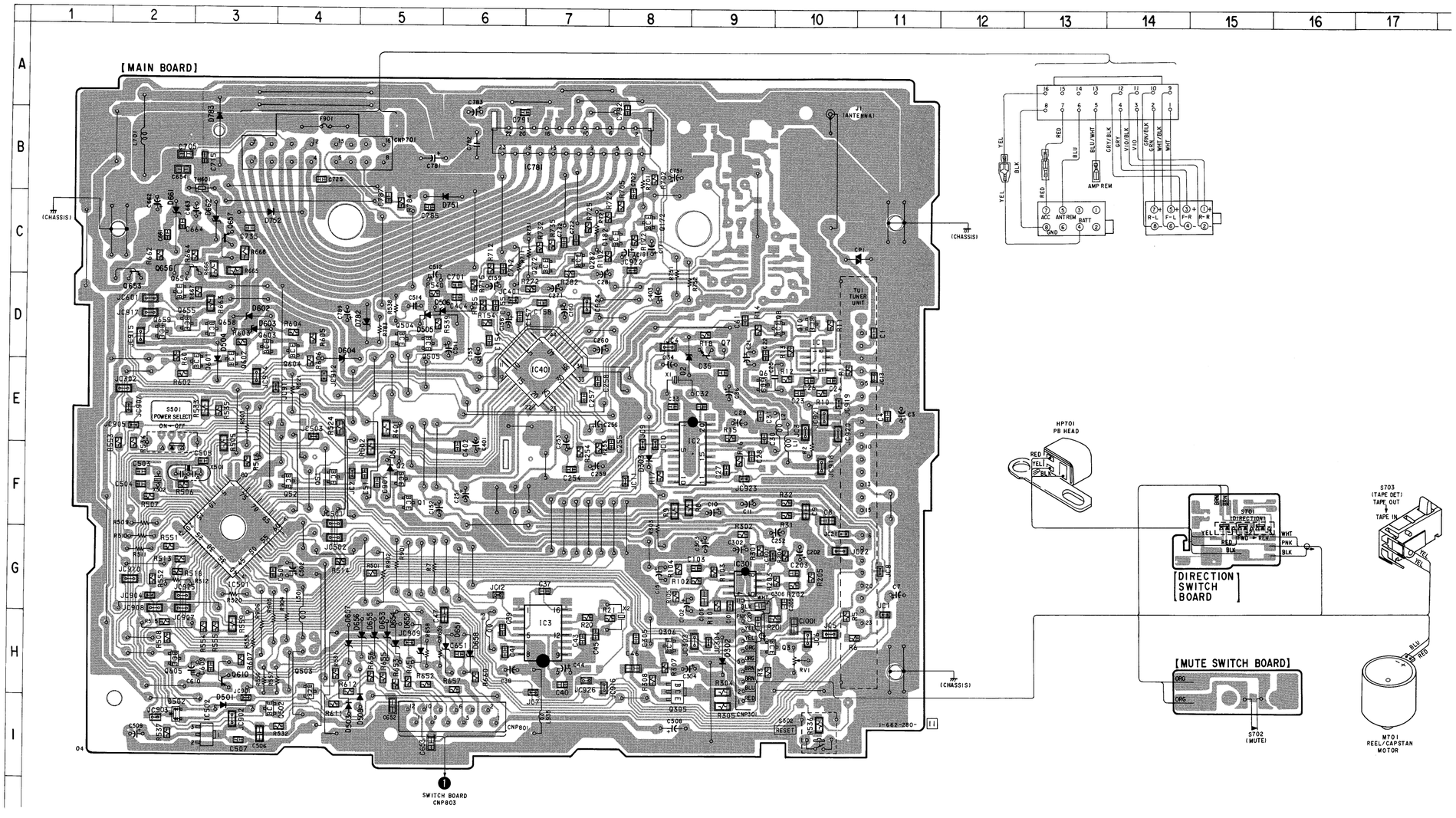
1. PRINTED WIRING BOARDS –MAIN SECTION–

• Semiconductor Location

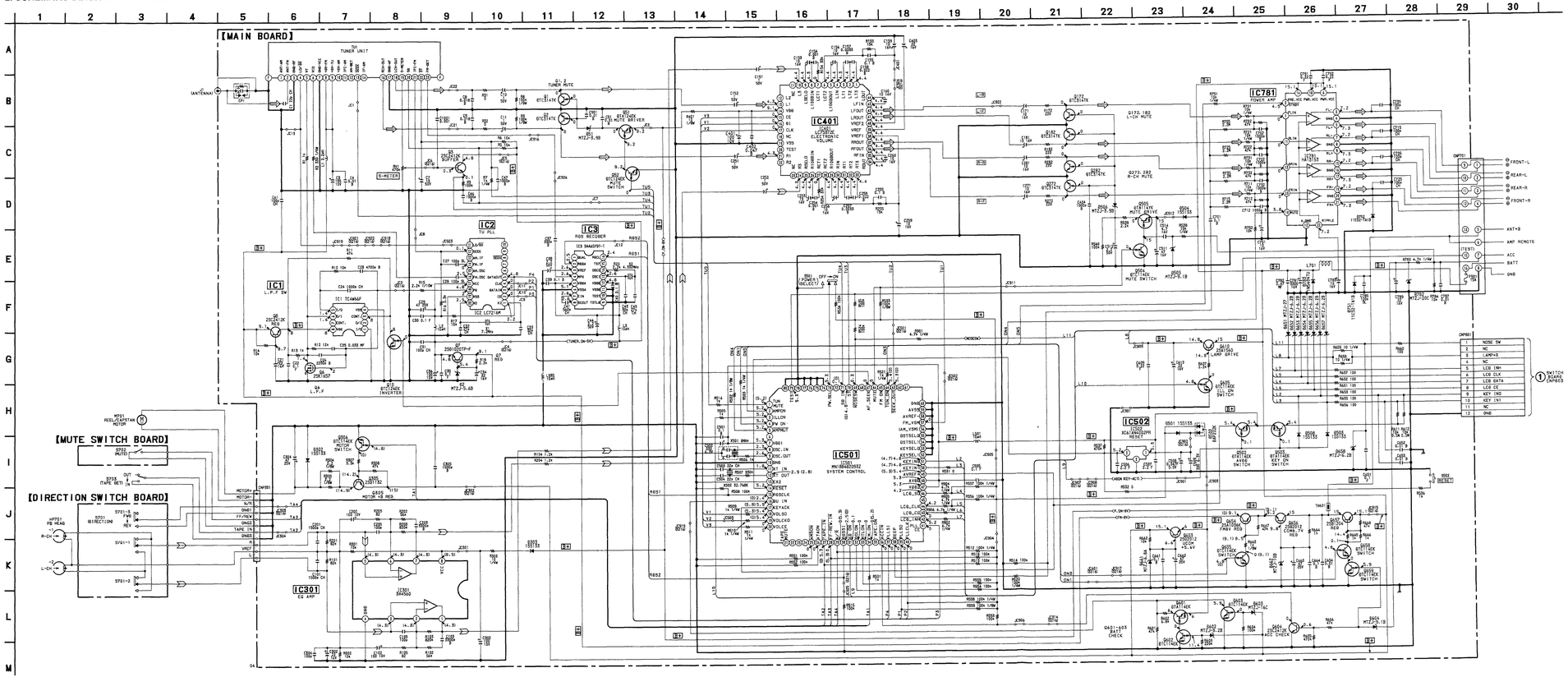
Ref. No.	Location	Ref. No.	Location
D2	D-8	IC502	I-3
D51	F-5	IC781	B-7
D302	H-9		
D303	F-8	Q1	F-5
D501	I-3	Q2	F-5
D502	I-2	Q3	H-9
D503	I-4	Q6	E-9
D504	D-3	Q7	D-9
D505	D-5	Q8	D-9
D506	D-5	Q10	D-10
D508	I-5	Q51	F-4
D602	D-3	Q52	F-4
D603	D-3	Q172	C-8
D604	D-4	Q182	C-8
D651	H-6	Q272	C-7
D652	H-5	Q282	C-7
D653	H-5	Q305	H-8
D654	H-5	Q306	H-8
D655	H-5	Q502	I-3
D656	H-5	Q503	H-4
D657	H-4	Q504	D-5
D658	H-6	Q505	D-5
D661	C-2	Q601	E-3
D662	C-3	Q602	E-3
D751	C-6	Q603	D-3
D752	C-3	Q604	D-4
D782	D-5	Q605	H-2
D783	B-3	Q610	H-3
		Q653	C-2
IC1	D-10	Q654	D-2
IC2	F- 8	Q655	D-2
IC3	H-7	Q656	C-2
IC301	G-9	Q657	C-3
IC401	E-7	Q658	D-3
IC501	G-3	Q659	D-2

Note :

• ○— : parts extracted from the component side.



2. SCHEMATIC DIAGRAM –MAIN SECTION–



Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- % : indicates tolerance.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
  ( ) : PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerance.
- Signal path.
  ⇨ : FM

3. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA.. : μA.. uPA.. : μPA..
  uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
  uF : μF
- COILS
  uH : μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3309-140-A	MAIN BOARD, COMPLETE			
		**********			
*	3-931-260-01	BRACKET (IC)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3	1-126-933-11	ELECT	100uF	20%	10V
C4	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C7	1-126-964-11	ELECT	10uF	20%	50V
C8	1-163-062-00	CERAMIC CHIP	0.018uF	10%	50V
C9	1-163-062-00	CERAMIC CHIP	0.018uF	10%	50V
C10	1-124-903-11	ELECT	1uF	20%	50V
C11	1-124-903-11	ELECT	1uF	20%	50V
C21	1-124-234-00	ELECT	22uF	20%	16V
C22	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C23	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C24	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C25	1-136-159-00	FILM	0.033uF	5%	50V
C26	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C27	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C29	1-104-664-11	ELECT	47uF	20%	25V
C30	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C31	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C32	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C33	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C34	1-124-234-00	ELECT	22uF	20%	16V
C35	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C36	1-124-584-00	ELECT	100uF	20%	10V
C37	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C38	1-124-257-00	ELECT	2.2uF	20%	50V
C39	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C40	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C41	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C43	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C44	1-124-257-00	ELECT	2.2uF	20%	50V
C45	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C46	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C47	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V

Ref. No.	Part No.	Description			Remark
C51	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C61	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C101	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C102	1-124-584-00	ELECT	100uF	20%	10V
C103	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C105	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C151	1-126-160-11	ELECT	1uF	20%	50V
C152	1-126-160-11	ELECT	1uF	20%	50V
C153	1-126-157-11	ELECT	10uF	20%	16V
C154	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C155	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C156	1-126-157-11	ELECT	10uF	20%	16V
C157	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C158	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C159	1-126-157-11	ELECT	10uF	20%	16V
C160	1-126-157-11	ELECT	10uF	20%	16V
C171	1-126-157-11	ELECT	10uF	20%	16V
C181	1-126-157-11	ELECT	10uF	20%	16V
C201	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C202	1-124-584-00	ELECT	100uF	20%	10V
C203	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C205	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C251	1-126-160-11	ELECT	1uF	20%	50V
C252	1-126-160-11	ELECT	1uF	20%	50V
C253	1-126-157-11	ELECT	10uF	20%	16V
C254	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C255	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C256	1-126-157-11	ELECT	10uF	20%	16V
C257	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C258	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C259	1-126-157-11	ELECT	10uF	20%	16V
C260	1-126-157-11	ELECT	10uF	20%	16V
C271	1-126-157-11	ELECT	10uF	20%	16V
C281	1-126-157-11	ELECT	10uF	20%	16V
C302	1-124-234-00	ELECT	22uF	20%	16V
C303	1-126-933-11	ELECT	100uF	20%	10V
C304	1-104-664-11	ELECT	47uF	20%	25V
C305	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C306	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C401	1-124-584-00	ELECT	100uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C402	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C403	1-124-234-00	ELECT	22uF	20%	16V
C404	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C502	1-128-057-11	ELECT	330uF	20%	6.3V
C503	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C504	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C505	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C506	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C507	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C508	1-125-701-11	DOUBLE LAYERS	0.047F		5.5V
C509	1-128-057-11	ELECT	330uF	20%	6.3V
C511	1-124-589-11	ELECT	47uF	20%	16V
C512	1-124-257-00	ELECT	2.2uF	20%	50V
C514	1-128-255-11	ELECT (NONPOLAR)	4.7uF	20%	16V
C609	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C610	1-124-234-00	ELECT	22uF	20%	16V
C651	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C652	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C653	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C654	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C661	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C662	1-104-664-11	ELECT	47uF	20%	25V
C663	1-104-664-11	ELECT	47uF	20%	25V
C664	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C701	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C702	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C705	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C712	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C715	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C722	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C725	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C732	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C735	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C751	1-126-157-11	ELECT	10uF	20%	16V
C781	1-126-936-11	ELECT	3300uF	20%	16V
C782	1-136-173-00	FILM	0.47uF	5%	50V
C783	1-126-157-11	ELECT	10uF	20%	16V
C785	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C787	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C789	1-124-234-00	ELECT	22uF	20%	16V
C791	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C792	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C901	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C1001	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
* CNP301	1-506-993-11	PIN, CONNECTOR (PC BOARD) 11P			
CNP701	1-774-701-11	PIN, CONNECTOR 16P			

Ref. No.	Part No.	Description	Remark
CNP801	1-764-422-11	PLUG, CONNECTOR 12P	
		< DISCHARGE GAP >	
CP1	1-519-504-11	GAP, DISCHARGE	
		< DIODE >	
D2	8-719-109-89	DIODE RD5.6ESB2	
D51	8-719-109-72	DIODE RD3.9ES-B2	
D302	8-719-991-33	DIODE 1SS133T-77	
D303	8-719-991-33	DIODE 1SS133T-77	
D501	8-719-991-33	DIODE 1SS133T-77	
D502	8-719-914-44	DIODE DAP202K	
D503	8-719-991-33	DIODE 1SS133T-77	
D504	8-719-991-33	DIODE 1SS133T-77	
D505	8-719-110-13	DIODE RD9.1ESB2	
D506	8-719-109-72	DIODE RD3.9ES-B2	
D508	8-719-991-33	DIODE 1SS133T-77	
D602	8-719-110-08	DIODE RD8.2ES-B2	
D603	8-719-923-93	DIODE MTZJ-T-77-16C	
D604	8-719-110-13	DIODE RD9.1ESB2	
D651	8-719-982-13	DIODE MTZJ-27	
D652	8-719-109-93	DIODE RD6.2ESB2	
D653	8-719-109-93	DIODE RD6.2ESB2	
D654	8-719-109-93	DIODE RD6.2ESB2	
D655	8-719-109-93	DIODE RD6.2ESB2	
D656	8-719-109-93	DIODE RD6.2ESB2	
D657	8-719-109-93	DIODE RD6.2ESB2	
D658	8-719-109-93	DIODE RD6.2ESB2	
D661	8-719-109-97	DIODE RD6.8ES-B2	
D662	8-719-110-17	DIODE RD10ESB2	
D751	8-719-200-82	DIODE 11ES2	
D752	8-719-200-82	DIODE 11ES2	
D782	8-719-110-53	DIODE RD20ES-B2	
D783	8-719-052-59	DIODE 1N5404TU-15	
		< FUSE >	
F901	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
		< IC >	
IC1	8-759-242-66	IC TC4W66F	
IC2	8-759-823-81	IC LC7216M	
IC3	8-759-065-98	IC SAA6579T	
IC301	8-759-924-46	IC BA4560F	
IC401	8-759-368-11	IC LC75372E	
IC501	8-759-395-48	IC MN1884820S3Z	
IC502	8-759-363-81	IC XC61AN4002PR	
IC781	8-759-369-42	IC HA13153	

Ref. No.	Part No.	Description			Remark
		< JACK >			
J1	1-770-279-12	JACK, ANTENNA (ISO) (ANTENNA)			
		< JUMPER RESISTOR >			
JC1	1-216-295-00	METAL CHIP	0	5%	1/10W
JC2	1-216-295-00	METAL CHIP	0	5%	1/10W
JC3	1-216-296-00	METAL CHIP	0	5%	1/8W
JC4	1-216-296-00	METAL CHIP	0	5%	1/8W
JC5	1-216-296-00	METAL CHIP	0	5%	1/8W
JC6	1-216-296-00	METAL CHIP	0	5%	1/8W
JC7	1-216-295-00	METAL CHIP	0	5%	1/10W
JC8	1-216-295-00	METAL CHIP	0	5%	1/10W
JC9	1-216-295-00	METAL CHIP	0	5%	1/10W
JC10	1-216-295-00	METAL CHIP	0	5%	1/10W
JC11	1-216-295-00	METAL CHIP	0	5%	1/10W
JC12	1-216-295-00	METAL CHIP	0	5%	1/10W
JC13	1-216-295-00	METAL CHIP	0	5%	1/10W
JC21	1-216-295-00	METAL CHIP	0	5%	1/10W
JC22	1-216-296-00	METAL CHIP	0	5%	1/8W
JC301	1-216-295-00	METAL CHIP	0	5%	1/10W
JC302	1-216-296-00	METAL CHIP	0	5%	1/8W
JC303	1-216-296-00	METAL CHIP	0	5%	1/8W
JC304	1-216-295-00	METAL CHIP	0	5%	1/10W
JC401	1-216-295-00	METAL CHIP	0	5%	1/10W
JC501	1-216-296-00	METAL CHIP	0	5%	1/8W
JC502	1-216-296-00	METAL CHIP	0	5%	1/8W
JC503	1-216-295-00	METAL CHIP	0	5%	1/10W
JC601	1-216-296-00	METAL CHIP	0	5%	1/8W
JC901	1-216-295-00	METAL CHIP	0	5%	1/10W
JC902	1-216-296-00	METAL CHIP	0	5%	1/8W
JC903	1-216-295-00	METAL CHIP	0	5%	1/10W
JC904	1-216-295-00	METAL CHIP	0	5%	1/10W
JC905	1-216-295-00	METAL CHIP	0	5%	1/10W
JC906	1-216-295-00	METAL CHIP	0	5%	1/10W
JC907	1-216-296-00	METAL CHIP	0	5%	1/8W
JC908	1-216-296-00	METAL CHIP	0	5%	1/8W
JC909	1-216-295-00	METAL CHIP	0	5%	1/10W
JC910	1-216-296-00	METAL CHIP	0	5%	1/8W
JC911	1-216-295-00	METAL CHIP	0	5%	1/10W
JC912	1-216-295-00	METAL CHIP	0	5%	1/10W
JC914	1-216-296-00	METAL CHIP	0	5%	1/8W
JC915	1-216-296-00	METAL CHIP	0	5%	1/8W
JC916	1-216-295-00	METAL CHIP	0	5%	1/10W
JC917	1-216-296-00	METAL CHIP	0	5%	1/8W
JC918	1-216-296-00	METAL CHIP	0	5%	1/8W
JC919	1-216-295-00	METAL CHIP	0	5%	1/10W
JC920	1-216-296-00	METAL CHIP	0	5%	1/8W
JC921	1-216-296-00	METAL CHIP	0	5%	1/8W
JC922	1-216-295-00	METAL CHIP	0	5%	1/10W
JC923	1-216-295-00	METAL CHIP	0	5%	1/10W
JC924	1-216-296-00	METAL CHIP	0	5%	1/8W
JC925	1-216-296-00	METAL CHIP	0	5%	1/8W
JC926	1-216-295-00	METAL CHIP	0	5%	1/10W
		< COIL >			
L1	1-410-501-11	INDUCTOR 2.2uH			
L2	1-410-509-11	INDUCTOR 10uH			
L3	1-410-509-11	INDUCTOR 10uH			
L501	1-410-509-11	INDUCTOR 10uH			
L701	1-411-669-12	COIL, CHOKE			
L935	1-410-509-11	INDUCTOR 10uH			
		< TRANSISTOR >			
Q1	8-729-920-21	TRANSISTOR DTC314TKH04			
Q2	8-729-920-21	TRANSISTOR DTC314TKH04			
Q3	8-729-920-74	TRANSISTOR 2SC2412K-QR			
Q6	8-729-021-94	TRANSISTOR 2SK1657-T1B			
Q7	8-729-102-14	TRANSISTOR 2SD1021			
Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR			
Q10	8-729-901-00	TRANSISTOR DTC124EK			
Q51	8-729-901-05	TRANSISTOR DTA124EK			
Q52	8-729-901-00	TRANSISTOR DTC124EK			
Q172	8-729-920-21	TRANSISTOR DTC314TKH04			
Q182	8-729-920-21	TRANSISTOR DTC314TKH04			
Q272	8-729-920-21	TRANSISTOR DTC314TKH04			
Q282	8-729-920-21	TRANSISTOR DTC314TKH04			
Q305	8-729-106-60	TRANSISTOR 2SB1115A			
Q306	8-729-900-53	TRANSISTOR DTC114EK			
Q502	8-729-901-04	TRANSISTOR DTA114EK			
Q503	8-729-901-04	TRANSISTOR DTA114EK			
Q504	8-729-900-53	TRANSISTOR DTC114EK			
Q505	8-729-901-46	TRANSISTOR DTA114YK			
Q601	8-729-901-04	TRANSISTOR DTA114EK			
Q602	8-729-900-53	TRANSISTOR DTC114EK			
Q603	8-729-900-53	TRANSISTOR DTC114EK			
Q604	8-729-920-74	TRANSISTOR 2SC2412K-QR			
Q605	8-729-900-53	TRANSISTOR DTC114EK			
Q610	8-729-016-02	TRANSISTOR 2SA1560-TL2-Q			
Q653	8-729-209-15	TRANSISTOR 2SD2012			
Q654	8-729-901-97	TRANSISTOR 2SA1036K-Q			
Q655	8-729-900-53	TRANSISTOR DTC114EK			
Q656	8-729-209-15	TRANSISTOR 2SD2012			
Q657	8-729-822-78	TRANSISTOR 2SB1204			
Q658	8-729-900-53	TRANSISTOR DTC114EK			
Q659	8-729-900-53	TRANSISTOR DTC114EK			

MAIN

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R1	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R2	1-249-411-11	CARBON	330	5%	1/4W
R3	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R5	1-216-073-00	METAL CHIP	10K	5%	1/10W
R6	1-216-073-00	METAL CHIP	10K	5%	1/10W
R7	1-249-417-11	CARBON	1K	5%	1/4W
R8	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R9	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R12	1-216-075-00	METAL CHIP	12K	5%	1/10W
R13	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R14	1-216-073-00	METAL CHIP	10K	5%	1/10W
R15	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R16	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R17	1-216-073-00	METAL CHIP	10K	5%	1/10W
R18	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R20	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R31	1-216-295-00	METAL CHIP	0	5%	1/10W
R32	1-216-295-00	METAL CHIP	0	5%	1/10W
R101	1-216-095-00	METAL CHIP	82K	5%	1/10W
R102	1-216-091-00	METAL CHIP	56K	5%	1/10W
R103	1-216-119-00	METAL CHIP	820K	5%	1/10W
R104	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R105	1-216-023-00	METAL CHIP	82	5%	1/10W
R154	1-216-085-00	METAL CHIP	33K	5%	1/10W
R155	1-216-077-00	METAL CHIP	15K	5%	1/10W
R172	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-033-00	METAL CHIP	220	5%	1/10W
R201	1-216-095-00	METAL CHIP	82K	5%	1/10W
R202	1-216-091-00	METAL CHIP	56K	5%	1/10W
R203	1-216-119-00	METAL CHIP	820K	5%	1/10W
R204	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R205	1-216-023-00	METAL CHIP	82	5%	1/10W
R254	1-216-085-00	METAL CHIP	33K	5%	1/10W
R255	1-216-077-00	METAL CHIP	15K	5%	1/10W
R272	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-033-00	METAL CHIP	220	5%	1/10W
R301	1-216-073-00	METAL CHIP	10K	5%	1/10W
R302	1-216-073-00	METAL CHIP	10K	5%	1/10W
R303	1-249-393-11	CARBON	10	5%	1/4W
R304	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R305	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R307	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R308	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R401	1-216-150-00	METAL GLAZE	10	5%	1/8W
R501	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R502	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R503	1-249-417-11	CARBON	1K	5%	1/4W
R505	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R506	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R507	1-216-109-00	METAL CHIP	330K	5%	1/10W
R508	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R509	1-249-417-11	CARBON	1K	5%	1/4W
R510	1-249-417-11	CARBON	1K	5%	1/4W
R511	1-249-417-11	CARBON	1K	5%	1/4W
R512	1-249-441-11	CARBON	100K	5%	1/4W
R513	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R514	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R515	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R516	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R518	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R520	1-249-441-11	CARBON	100K	5%	1/4W
R521	1-249-417-11	CARBON	1K	5%	1/4W
R524	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R531	1-216-295-00	METAL CHIP	0	5%	1/10W
R532	1-216-295-00	METAL CHIP	0	5%	1/10W
R533	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R534	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R535	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R536	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R537	1-216-113-00	METAL CHIP	470K	5%	1/10W
R538	1-249-429-11	CARBON	10K	5%	1/4W
R539	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R540	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R551	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R552	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R553	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R554	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R555	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R556	1-249-441-11	CARBON	100K	5%	1/4W
R557	1-249-441-11	CARBON	100K	5%	1/4W
R558	1-249-441-11	CARBON	100K	5%	1/4W
R559	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R601	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R602	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R603	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R604	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R605	1-216-113-00	METAL CHIP	470K	5%	1/10W
R606	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R607	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R611	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R612	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R651	1-216-025-00	METAL GLAZE	100	5%	1/10W
R652	1-216-025-00	METAL GLAZE	100	5%	1/10W
R653	1-216-025-00	METAL GLAZE	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R655	1-216-025-00	METAL GLAZE	100	5%	1/10W
R656	1-216-025-00	METAL GLAZE	100	5%	1/10W
R657	1-216-025-00	METAL GLAZE	100	5%	1/10W
R658	1-249-393-11	CARBON	10	5%	1/4W
R659	1-249-393-11	CARBON	10	5%	1/4W
R660	1-216-025-00	METAL GLAZE	100	5%	1/10W
R662	1-216-073-00	METAL CHIP	10K	5%	1/10W
R663	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R664	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R665	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R666	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R667	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R668	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R705	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R711	1-249-429-11	CARBON	10K	5%	1/4W
R712	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R715	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R721	1-249-429-11	CARBON	10K	5%	1/4W
R722	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R725	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R731	1-249-429-11	CARBON	10K	5%	1/4W
R732	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R735	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R751	1-249-429-11	CARBON	10K	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R783	1-249-425-11	CARBON	4.7K	5%	1/4W
R784	1-216-073-00	METAL CHIP	10K	5%	1/10W
R901	1-249-425-11	CARBON	4.7K	5%	1/4W
R902	1-249-425-11	CARBON	4.7K	5%	1/4W
R904	1-249-425-11	CARBON	4.7K	5%	1/4W
R905	1-249-425-11	CARBON	4.7K	5%	1/4W
R906	1-249-425-11	CARBON	4.7K	5%	1/4W
		< VARIABLE RESISTOR >			
RV1	1-238-605-31	RES, ADJ, CARBON 470K			
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S502	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR(POSITIVE) >			
TH601	1-809-148-11	THERMISTOR, POSITIVE			
		< TUNER >			
TU1	1-473-635-11	TUNER UNIT			

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-577-126-51	VIBRATOR, CRYSTAL (7.2MHz)	
X2	1-760-556-11	VIBRATOR, CRYSTAL (4.332MHz)	
X501	1-579-952-21	VIBRATOR, CERAMIC (8MHz)	
X502	1-567-098-61	VIBRATOR, CRYSTAL (32.768kHz)	

9-923-489-81

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